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Master Class:
Exploring Innovative Practice in Educational Leadership;
A Study of Change, Complexity, Culture and Community in
Co-creating Learning Organizations

DISSERTATION

Presented in Partial Fulfillment of the Requirements for
the Degree Doctor of Philosophy in the
Graduate School of The Ohio State University

By

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ABSTRACT

This is a study about practice and innovation. A study of an organizational transformation that traces the development of a learning organization. The main goal of this study is to describe, understand, and interpret how graduate students at a large mid-western public university engage in the co-creation of a learning organization and establish a theory of action of this organizational change. The study focused on the procedures, instructional strategies, resources and the experiential learning activities that were created and used by the learning community. In other words, how the class was designed by the learners.

This study describes change-in-practice in the co-creation of a learning organization by a community of learners: establishes the implementation, processes, and development of an educational innovation in higher education, and develops a theory of action of what occurred in this holistic program model. The definition of the objective reality of this innovation will move educators and educational institutions engaged in change one step closer to understanding the nature of educational change in academia.

In addition, the study addresses a new form of instructional design, a co-created emergent course design. The study also contributes to the existing bodies of knowledge in multiple areas: educational innovation, educational change, organizational
change and development, self-directed learning, instructional and curriculum design in graduate education, and leadership development.

Complexity theory offers a comprehensive new framework for bringing together a number of already existing insights about human systems into a coherent theory that is dramatically different from the research paradigm currently used. In this study, complexity theory is the overarching framework used to describe the theory of action.

Three themes emerged in the study of co-creation of a learning organization — change, community and culture. Recommendations for pedagogical practice, curriculum design and leadership development are provided.
A

María Josefina Barbosa Colón.
Pedro Juan Barbosa Sánchez y María Encarnación Colón Lopez.
Mary Jo García Barbosa.
Pedro Juan Barbosa Colón.
José Celso Barbosa y Alcalá.

De
Barbosa a Barbosa.

De
Doctor a Doctor.
¡Gracias!

Es importante, en un trabajo de esta magnitud, el agradecer a las personal especiales que colaboraron en mi desarrollo personal y educativo que originaron las ideas de este estudio.

Primeramente, mis maestros. El estudio no se llamaría Clase Magistral si no hubiese estudiado con profesores magistrales. Por tanto mis primeros agradecimientos van a los profesores que tuvieron un profundo impacto en mi carrera:


I love music. so my thanks are like a CD insert. since I’ll never be a singer .... I will start by categories and finish individually. Remember, that the whole is more than the sum of its parts ... but, what parts!


The ones that kept me sane at the end: Mary Jo De Paola (formerly known as García-Barbosa), Ronald Charles Katana, Lakshmi Raman, Aziza Ashraf Farooki.
Andrea Karch Balas. John Roch Mascazine, Eugenie Maxwell, Barbara S. Thomson and Mary Jo Barbosa.

My family: The ones in Puerto Rico (the 51st state), Mary Jo Barbosa, Pedro Juan Barbosa, and Rodnie Barbosa. The ones in Florida: Mary Jo García-Barbosa (when I started) DePaola (by the time I finished), John DePaola and José C. Barbosa. The ones in Chardon, Ohio: Lorraine, John, Brian and David Harchar. The ones in Columbus, Ohio: Aziza Farooki, Barbara S. Thomson and Victor Showalter.

My close friends: Aziza Ashraf Farooki, my first born will bear your name, thanks for the editing. Ronald Charles Katana, thanks for believing and proof-reading. Hsi-Chi Huang, “Linda Eder is coming to town!” Steve Alan Snyder, thanks for everything “Can you fix...?” Lakshmi Raman, “call me when you get home”- Excuse me, your research got quoted in the New York Times!- the saga continues. Andrea Karch Balas. Miss “published author: Happy, happy, happy” (see the arms move). Genie Maxwell. “you’re doing well.” John Roch Mascazine. “are you spoken for?” Couldn’t ask for a better friend. Mark Hanes, thank you so much for all your technical help.

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One note on inspiration...as always musicals...The Complete Work of Jekyll and Hyde, the gothic musical thriller...“I Need to Know and This is the Moment.” As always Yentl’s “Where is it Written?” and “There are Moments.”
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CHAPTER 1

THE NEW FACE OF EDUCATIONAL CHANGE

While looking towards the twenty first century, educational reformers, educators and instructional designers are trying to find, create and disseminate the best educational practices that will ensure student success both in classrooms and life. During the next millennium the traditional face of the American educational population will change with a major influx of previously under-represented groups. As educational institutions try to reframe their organizational perspectives and beliefs to accommodate for the ever changing student populations, the rapid changes in our societal environment, the constant development of new technology, the development of a global economy and marketplace and, the development of new international/intercultural relationships, the modes of instruction will require re-evaluation and change.

Universities and colleges are organizations where learning occurs, but where instruction, instructional strategies, course design, and course philosophy usually do not change much (Rosovsky. 1990). In order to effectively bring about this needed change, teachers, as leaders in the field of education, must engage with their students in the change process. To successfully accomplish change in educational institutions new practices must be adopted, that will change the organizational culture, people’s perceptions, attitudes and beliefs as well as the observable tasks and structures of
the organization. At issue now is how educational leaders, students and other change agents transform themselves in order to effectively bring about these organizational changes. In this situation teachers become catalysts for the change process (Fullan, 1993).

Many national figures in higher education have made several calls for action and change in academia. Ernest Boyer in *College: The Undergraduate Experience* called for a major change in undergraduate education. The Holmes Group in their *Tomorrow's Teacher. Tomorrow's School* and *Tomorrow's Student* reports called for a reevaluation and restructuring of teacher education programs, professional development schools, and schools as a whole (Holmes Group, 1986, 1988, 1995).

In the field of education most reports and calls for change focus on either K-12 instruction or post secondary undergraduate education. The different educational reform movements have bypassed graduate education. Ironically, the scholars calling for action in educational change have ignored the needs for change in graduate education, which is what gives their first tier research universities status and ranking. In many institutions graduate education is seen as a second cousin to the institutions of higher learning. The real students where all concern is focused are the undergraduates (Rosovsky, 1990). Although, research strategies and research paradigms have taken a drastic change in the last two decades with a major shift from a quantitative research paradigm in education to qualitative research, the core of graduate educational practice has been fairly static (Patton, 1990).

The purpose of educational change is to help educational institutions accomplish their goals more effectively by replacing programs and/or practices with more effective ones. Educational change is a process in which educators engage when they innovate.
Educational innovations are planned interventions, which are novel, deliberate and specific enough to help the organization achieve new goals (Owens, 1991). For many proponents of change the substance of educational change is to help students accomplish changes in goals, skills, philosophy, values, beliefs and behaviors.

There is a need for educators to have a coherent and clear picture of the process of educational change in academia. The problem of meaning is central to making sense of educational change. Meaningful educational change must include an understanding of the worth and process of a particular change. One of the most fundamental problems in education today is to establish a clear and coherent sense of meaning about what occurs when educational change takes place. Meaningful educational change can be clarified by identifying and describing three main dimensions in the implementation of an innovation: 1) the use of new or revised materials, 2) the use of new teaching approaches and, 3) the alteration of beliefs (Fullan & Stiegelbauer, 1993).

1.1 The Nature of Planned Change

Organizational development is the process for increasing the self-renewal capability of organizations. It is a complex approach to improving organizational performance. Organizational development is directed at bringing about planned change to increase an organization's effectiveness. Planned change can be used to solve problems, learn from experience, adapt to external environmental changes, improve performance and, influence future changes (Cummings & Worley, 1997).

The focus of the theories of change is how change is implemented in organizations. These frameworks describe the activities that must take place to initiate and carry
Lewin's change model conceives change as modification of the forces keeping a system's behavior stable (Owens, 1991; Cummings & Worley, 1997). Since the level of behavior at any moment in the organization results from the forces striving to maintain the status quo and those pushing change, when both sets of forces are about equal, current levels of behavior are maintained in a state of quasi-stationary equilibrium (Cummings & Worley, 1997). In this model, the strategy for change is the modification of the forces maintaining the status quo in the organization, which in turn brings about change with less tension and resistance.

According to Lewin's model, the change process consists of three steps: 1) unfreezing— involves reducing the forces maintaining the organization's quasi-stationary behavior. 2) moving—shifts the behavior of the organization to a new level. It involves developing new behaviors, values, and attitudes through changes in organizational structures and processes. 3) refreezing—stabilizes the organization at a new state of equilibrium. Refreezing is frequently accomplished through the use of supporting mechanisms that reinforce the new organizational state, such as organizational culture, norms, policies, and structures (Owens, 1991; Cummings & Worley, 1997).

### 1.2 Organizational Culture and Learning

The concept of organizational culture is important in understanding seemingly irrational human systems (Schein, 1992). Organizational culture is a pattern of basic assumptions—invented, discovered, or developed by a given group as it learns to cope with its problems of external adaptation and internal integration, that has worked well enough to be taught to new members as the correct way to perceive, think, and feel in relation to those problems. According to Schein (1992), culture is a learned
product of group experience and is to be found only where there is a definable group
with a significant history.

There are three levels of culture: 1) artifacts, 2) values, and 3) basic assumptions.
Artifacts are the most visible level of culture and it consists of constructed physical
and social environment. Values reflect someone's original ideas of what ought to be
and are testable by social consensus. Basic assumptions are implicit assumptions that
guide behavior with little variation within a cultural unit. Basic assumptions are the
essence of culture: values and behavior are manifestations of that essence (Schein.
1992: Ott. 1989). To change the basic assumptions we have to use a process called
double loop learning which involves a change in the dominant schema of a system
as it adapts its behavior to the stimuli presented. Double-loop learning results in
innovation and creativity.

1.3 Systems, Chaos and Complexity

Every human organization is a network of people who interact with each other
and with agents in other organizations that constitute its environment. Human sys­
tems are nonlinear feedback systems that are coevolving, interacting networks of
agents and subsystems whose behavior is driven by schemas, and in the process they
learn. According to Stacey (1996), the science of complexity offers a comprehensive
new framework for bringing together a number of already existing insights about hu­
man systems into a coherent theory that is dramatically different from the current
paradigm.

The science of complexity studies the fundamental properties of nonlinear feed­
back networks and particularly of complex adaptive networks. In complexity theory.
there are two types of nonlinear feedback systems, deterministic and adaptive. A deterministic nonlinear feedback system is a network of agents whose behaviors are determined by a common schema consisting of a few rules that are fixed over time, are applied to all agents without exception, and are not involved with achieving some purpose. In this type of system there is no learning of any kind only the constant repetition of previous behaviors.

In contrast, complex adaptive systems (CAS) have an inherent order that is waiting to be unfolded through the experience of the system. The order of the system is unknown until it unfolds in real time (Stacey. 1996). Complex adaptive systems consists of a number of components or agents that interact with each other according to sets of rules that requires them to examine and respond to each other's behavior in order to improve their behavior, therefore, the behavior of the system. Such systems operate in a manner that constitutes learning. Human groups are complex adaptive systems.

Complex adaptive systems are creative learning systems. Creativity lies at what scientist call the edge of chaos, the phase between order and disorder zones of operation in a complex adaptive system. A system at the edge of chaos is in a state capable of change.

In complex adaptive systems at the edge of chaos, creativity is viewed as being able to learn in complex ways. Neither the creative process nor their outcomes can be planned or intended because long term outcomes are truly unknowable at the edge of chaos (Stacey. 1996).
1.4 Description Of The Policy Lab

The co-created class sequence under study consisted of two 5 credit graduate courses in the School of Public Policy and Management. *Co-creating Learning Organizations: Learning to Lead, Leading to Learn I and II* was a two quarter long policy laboratory offered during the Winter and Spring quarters. Leadership laboratories are an intervention technique aimed primarily at giving participants a better understanding of what makes a group function, and how to function in a group. It also provides a better understanding of interpersonal and intergroup communication (Varney, 1996).

1.5 Course Participants

Participating in the course experience were graduate students in doctoral and master’s degree programs from public policy and management and educational policy and leadership majoring in higher education, general-professional studies, ethics and technology, and physical education. Participants held a variety of degrees ranging from business and education to aerospace engineering. These students held, or were preparing for positions with state and public agencies, universities, and the military. Several were full-time students, some with graduate assistant positions, and while others employed full-time in government, education, and the military, and taking one or more classes. Among participants there were national, and international students from Korea, Belize, Portugal, and India. Altogether, the twenty-two class participants from the Winter quarter included four coaches and one observer, and for one month a visiting professor. the twenty class participants from the Spring quarter, included
the same four coaches and observer. The class participants brought great diversity to their groups in backgrounds and professions, in personality styles and interests.

The class members met in a large conference room with a long rectangular table in the center. A second table in the front corner of the room held the overhead projector and course materials and handouts for each evening. There was a chalkboard in one of the classroom's walls, and static cling sheets with dry erasers were available. Small group work took place in cluster settings spaced around the room. There were chairs around the table and also chairs against each of the two long walls. Students drew these together into small conversational groupings for the exercises. Sometimes, the tables were pulled aside to make a larger space for demonstrations or exercises that required more room.

1.6 Problem Statement and Question

This is a study about practice and innovation. A study of an organizational transformation that traces the development of a learning organization. The main goal of this study is to describe, understand, and interpret how graduate students at a large mid-western public university engage in the co-creation of a learning organization and establish a theory of action of this organizational change. The study focused on the procedures, instructional strategies, resources and the experiential learning activities that were created and used by the learning community. In other words, how the class was designed by the learners.

The following areas were investigated in this research study:

- Educational innovations and change process

- Human systems and complex adaptive systems
• Organizational culture and learning

• Learning communities and learning organizations

These research areas may be summarized in the research question that follows. This question guided the researcher:

• What is the theory of action of an educational change consisting of the design, co-creation and development of a learning organization by a community of learners?

1.6.1 Additional Questions

The secondary questions that follow provide additional detail to the overall focus of the study.

• What educational strategies teams used to co-create the learning organization?

• What type of resources and experiential learning activities did teams create and use?

• What was the emergent design of the co-created course?

The answer to these questions contributed to a more complete understanding of the creation of a learning organization.

1.7 Definition Of Terms

Primary among the concepts involved in this research are innovation, practice, leadership, change, complexity, community, co-creating, and learning organizations. In this section, term definitions are provided, and further consideration is given in Chapter 2.
Innovation

Owens (1991), uses the term innovation referring to planned, novel, deliberate, specific change that is intended to help an organization achieve new goals. According to Stacey (1996), innovation can be potential or actual. Potential innovation occurs when an agent or system alters its dominant schema. A schema consists of a set of rules that reflect regularities in experience and enables a system to determine the nature of further experience and make sense of it. It establishes how the system should respond to its experience, which may include extending, modifying, or changing the rules comprising the schema. Actual innovation occurs if this alteration is beneficial to the agent or system in the sense of increasing its fitness, and that happens when the change in behavior delivers what those agents and systems being interacted with demand or accept as the price for further interaction.

Practice

The term practice signifies what the professionals in a discipline do. The practices are activities upon which practitioners of a discipline focus their time and energy. They are the most evident aspect of a discipline, and are the primary focus of individuals or groups when they begin to follow a discipline (Senge, 1990). A discipline is a developmental path, a body of theory and technique that must be studied and, mastered and put into practice for acquiring certain skills and competencies. According to Senge (1990):

To practice a discipline is to be a lifelong learner. You “never arrive”; you spend your life mastering disciplines. (p.11)

Thus, a learning organization is always in the state of practicing the disciplines of learning.
Leadership

Leadership is defined as the art of mobilizing others to want to struggle for shared aspirations (Kouzes & Posner, 1995). The true essence of leadership is mobilizing others to want to do, to want to act, in a voluntary manner, in articulating a shared vision of the future by exercising their choice, internal motivation, and inner desire. In this study we will use the term leadership, as the fullest expression of your “self” (Backoff, 1998).

Change

The term change is used to describe organizational change that combines inner shifts in people’s values, aspirations, and behaviors with outer shifts in processes, strategies, practices, and systems. Therefore, in order to accomplish organizational change, both inner and outer shifts are needed. It is not enough to change strategies, structures, and systems, unless the thinking that produced those strategies, structure, and systems also changes (Senge et al., 1999).

Complexity

The term complexity describes a situation in which information about behavior is so irregular that its description cannot be compressed. In this case, information cannot be summarized, only reproduced in full; that is, a schema is required to describe the extremely few regularities that do exist (Stacey, 1996).

Community

According to Palmer (1998), community is an outward and visible sign of an inward and invisible grace, the flowing of personal identity and integrity into the
world of relationships. Reality is a web of communal relationships. In this study the researcher uses the term learning community, as a group of individuals who share and support the learning process of self and others.

Co-creating

Co-creating is the act of combining resources to create an educational experience in which every member of the class is an active creator of the content and procedures that are used in the learning process. Co-creating is the process whereby agents entrain information and the system is in a state of emergence.

Learning organizations

Senge (1990) defines a learning organization as a group of people, a community, that continually expand their capacity to create results that they desire to create, where new patterns of thinking are nurtured, and where people are continually learning how to learn together. The term learning organization is a category created in language to express the possibilities of learning. This concept is not a label that describes a preexisting reality (Kofman & Senge. 1995). Senge (1995) states that:

> When we speak of a learning organization we are not describing an external phenomenon or labeling an independent reality. We are taking a stand for a vision, for creating a type of organization we would truly like to work within and which can strive in a world of increasing interdependency and change. (p.32)

1.8 Assumptions Of The Study

This study is guided by the following assumptions:

1. The course produces change, both personal and professional.
2. The change produced is positive.

3. Knowledge is socially constructed by the community of learners.

4. Learning is a holistic process, it involves the cognitive processes as well as the affective and psychomotor processes.

5. Learners like and want responsibility for their own learning.

6. Freedom and choice are desirable when learning.

7. Learners are volunteers in the learning process.

8. The activities will help learners stretch and grow.

9. Participants will be open and honest with the researchers.

10. Knowing who you are, self awareness will make you a more effective learner, teacher, and leader.

11. The creation of a learning organization is possible.

12. Co-creating a class is possible and desirable.

13. Learning is a complex endeavor which can be studied/researched.

1.9 Delimitations Of The Study

The study had a number of delimitations. Not all the members of the Winter class remained for the Spring class. Since the class was an elective it was not necessary for participants to remain for the whole two quarters. New students were added to the second quarter group.
The individual realm of the participants was not examined, as the study focused on the collective. Research literature was brought forth a posteriori.

1.10 Significance of the Study

The task of change theorists and practitioners is to accumulate the wisdom and experience about how dynamical change processes work. This study describes a change-in-practice in the co-creation of a learning organization by a community of learners: establishes implementation, processes, and development of an educational innovation in higher education. The study developed a theory of action of what occurred in this holistic program model. The definition of this innovation can move educators and educational institutions engaged in change one step closer to understanding the nature of educational change in academia.

In addition, the study addresses a new form of instructional design, a co-created emergent course design. The study also contributes to the existing bodies of knowledge in multiple areas: educational innovation, educational change, organizational change and development, self-directed learning, instructional and curriculum design in graduate education, and leadership development.
CHAPTER 2

REVIEW OF RELATED LITERATURE

The purpose of the literature review chapter is to provide a conceptual basis for the educational innovation presented in this study: the design and co-creation of a learning organization by a community of learners in academia. The following areas were investigated in this research study: 1) educational innovations and change process, 2) human systems and complex adaptive systems, 3) organizational culture and learning, and 4) learning communities and learning organizations. The chapter reflects an eclectic and multidisciplinary approach, with no effort being made to probe the depths of any one literature, but rather to draw from many sources to provide the frameworks and supports deemed relevant to the study.

The literature was examined to determine the need for educational innovation and educational change in academia and to elucidate the need for the intervention. Additionally, the chapter provides readers with a context in which to understand, the nature of change, educational change and innovation, human systems, organizational culture and learning, communities and learning organizations. The literature review provides evidence for the choice of the research topic and the foundation upon which the research was done. Also, the literature selected provides a basis upon which to
ground expectations regarding research findings and, offers a framework in which to understand the delimitations of the study.

2.1 Education, Change and Academia

Educational philosophy provides the answers to questions about, and defines the nature of a good life, and a good society (Tyler, 1949). In American society, educational institutions establish a philosophy of education in accordance with the goals and purposes of a democratic society (Fullan, 1993). A philosophy of education is concerned with the meaning of pedagogical theory, and with developing a self consistent pedagogical world view (Chambers, 1983). According to Willimon and Naylor (1995), an educational philosophy includes:

(1) some notion of the meaning or purpose of education, (2) a statement of educational values, (3) ethical principles, and (4) a statement of social responsibility... Surely the most difficult step for academic administrators in formulating an educational philosophy involves verbalizing one's sense of the purpose or meaning of higher education. (p. 63)

Formulating an educational philosophy involves verbalizing one's sense of the purpose of higher education. According to Willimon and Naylor (1995), some alternative purposes of American higher education are to:

- teach students how to think critically
- facilitate student's search for meaning
- prepare students to live in a democratic society
- train students for a specific vocation
- raise the level of self-confidence of students
According to Willimon and Naylor (1995), American higher education is faced with three fundamental problems:

1. Meaninglessness.

2. Fragmentation of a student's life into unrelated, incoherent components, and

3. The absence of community. (p.15)

To confront these problems Willimon and Naylor (1995) suggest that educational institutions engage in the following four strategies:

1. Restructure academia

2. Have professors who teach.

3. Curriculum reform. and

4. Re-create colleges and universities as learning communities. (p.18)

2.1.1 Education

Education is the encompassing term used to describe all the experiences in which people learn, whether the experiences are pre-planned or not (Smith & Ragan, 1993).

Palmer (1998) states that in classical understanding, education is:

the attempt to "lead out" from within the self a core of wisdom that has the power to resist falsehood and live in the light of truth, not by external norms but by reasoned and reflective self-determination. (p.31)

Naylor, Willimon and Naylor (1994) establish that:
Education ought to be a continual, lifelong affair, an indispensable tool in the search. Defined as the systematic, purposeful effort to transmit, evoke, or acquire knowledge, attitudes, skills, or values, education is at the heart of the search. However, there are problems with the way most of us have experienced education. (p.190)

Development is always a process of outgrowing one system of meaning by integrating it into a new system of meaning. What was "the whole" becomes "part" of a new whole (Kegan, 1982).

Willimon and Naylor (1995), call for a complete restructuring of universities including the way they are organized, the way in which students are taught and the substance of the curriculum. Lucas (1998), states that American higher education is so diverse and varied in character that most sweeping generalizations about its overall condition are practically meaningless. He acknowledges that the main crisis in American higher education today, it is that of purpose within the university.

Since higher education institutions must engage in curriculum reform, the starting point of such reform should be the vision of what constitutes an educated person in an egalitarian meritocratic society. Currently, the image of an educated person in the college curriculum appears to be that of a person without a point of view, devoid of commitment, but who has been exposed to the maximum number of lifestyles options (Willimon & Naylor, 1995).

In American higher education the curriculum does not carry the full burden of collegiate education, since it is professors who are critically important. Faculty members control the academic rules, shape the curriculum, and help create the climate for learning on campus. Through their professional priorities and in their relationships with students, professors sustain or weaken the intellectual and social environment of the college or university (Boyer, 1990). Willimon and Naylor (1995) state that
academia must become a genuine learning community where there is real communication between students and faculty, and a sense of commitment among its members. In community, students and faculty are seriously concerned about each other's well being. It is a partnership of people committed to the care and nurturing of each other's mind, body, heart and soul through participatory means (Willimon & Naylor, 1995; Merriam & Clark, 1991).

William and Naylor (1995) state that in order to change the organizational culture, the institutions of higher education need to develop a collective, comprehensive strategy that begins with a clearly articulated statement of values, supported by sustained public discussion, and the commitment of resources. Educational values are social principles or standards, by which we judge ourselves, which form a picture of who we want to be. Educators must judge all college activities on the basis of their educational value (Boyer, 1990).

In American society there is an image of an ideal student that "plays hard and works hard." This perception leaves out the image of a student who also thinks hard. In academia students must practice the habit of thinking hard which requires a complex system of interaction between generations, engagement, patience, linkage of ideas and experiences, time and space. Ironically, due to a lack of community, the American academia is not facilitating this very essential need at any educational level (Boyer, 1990; Willimon & Naylor, 1995; Rosovsky, 1990). As Willimon and Naylor (1995) express. "Students are only here as a necessary evil—to finance faculty research." (p.26)

Willimon and Naylor (1995) add that in academia:

Change of culture is not impossible... institutions need to develop a collective, comprehensive strategy that begins with a clearly articulated
statement of values and is supported by sustained public discussion and the commitment of resources.... Yet a “clearly articulated statement of values” is precisely what many of our educational institutions lack. (p.35)

At the end of the millennium, both faculty and students in academia exhibit a “self-centeredness that renders them incapable of working with others”. Faculty tend to behave as academic free agents, without much responsibility to the institution in which they serve (Rosovsky, 1990; Owens, 1991). Currently most participants in American higher education are concerned exclusively with the attainment of individual goals. They know how to compete but not how to collaborate. As with faculty and students, each academic institution and graduate school has its own culture, values and priorities which defy the notion of community (Willimon & Naylor, 1995).

Thus, the ultimate test of whether or not a college or a university is a community is “whether students and faculty are seriously concerned about each other’s well-being.” (Willimon and Naylor, 1995. p. 146).

2.1.2 Innovation and Educational Change

Change is the hallmark in all modes of human endeavor. Rapid transformational changes in society, increasing global interdependencies, and the accelerating pace of technology development, require more flexible and adaptive organizations. As society changes, there is a need for change in academia. According to Fullan (1995), the moral purpose of education is to make a difference in the life of students regardless of background, and to help produce citizens who can live and work in an increasingly dynamic complex society. Productive educational change, the ability to survive planned and unplanned change while growing and developing, is at the core of moral purpose.
Educational innovations are those practices and programs that help students develop the capacity to become moral change agents in society (Fullan, 1999). Educational innovations are planned interventions, which are novel, deliberate, and specific enough to help academia achieve new educational goals for the promotion of attributes in students that will help them to create and adapt to the changing societal conditions (Owens, 1991). The substance of educational change is to help students accomplish changes in goals, skills, philosophy, beliefs, and behaviors. Educators need to work toward these goals.

Fullan and Stiegelbauer (1995), establish three dimensions in the implementation of a meaningful educational innovation:

- the use of new materials and resources.
- the use of new teaching approaches, and
- the alteration of beliefs.(p.37)

An innovation, as a set of new materials and resources (curricular change) is the most visible aspect of change, and the easiest to employ in the field of education. The alteration of the teaching approach (instructional change) presents a greater difficulty since new skills must be acquired, and new ways of conducting instructional activities established. In education, the beliefs are the pedagogical assumptions, and theories underlying particular policies, programs and practices. Therefore, the most difficult aspect of change in education is alteration of beliefs, because it challenges the core values held by individuals regarding the purposes of education. Furthermore, beliefs are usually often not explicit, discussed, or understood, which means they are buried at the level of unstated assumptions (Fullan & Stiegelbauer, 1993; Schein, 1992).
Fullan and Steigelbauer (1991), stress that educational change in practice has to occur along these three dimensions in order to affect the educational goals. The use of new or revised materials by themselves may accomplish certain educational objectives, but developing new teaching skills and understanding conceptually what and why something should be done, and to what end, represents much more fundamental change, and as such will take longer to achieve but will have a greater impact once accomplished. Innovations that do not include these dimensions of educational change are probably not significant. All three dimensions of change are essential (Fullan & Stiegelbauer, 1993).

Change in teaching approach or style in using new materials presents greater difficulty if new skills must be acquired and new ways of conducting instructional activities established. Changes in beliefs are even more difficult: they challenge the core values held by individuals regarding the purposes of education: moreover beliefs are often not explicit, discussed, or understood, but rather are buried at the level of unstated assumptions. (p.42)

Researchers, teachers, and policy analyst’s agree that the context for teaching practice is idiosyncratic, nonlinear, and loosely connected (Sergiovanni, 1992a).

### 2.1.3 Educational Change Implementation

Educational change involves two main aspects: 1) what changes to implement, based on theories of education, and 2) how to implement them, based on theories of change. Change in education occurs both at the individual, and organizational level. Organizational change may produce the conditions to foster an individual’s change in practice. Although change occurs at the individual level, it should be recognized that organizational changes are often necessary to provide supportive or stimulating conditions to foster individual change in practice (Fullan, 1993).
There are two different approaches for implementing educational change, the fidelity perspective and the evolutionary perspective. The fidelity approach to change, is based on the assumption that an already developed innovation exists and the task is to get individuals and groups of individuals to implement it faithfully in practice that is, to use it as it is “supposed to be used,” as intended by the developer (Fullan & Stiegelbauer. 1993). The mutual-adaptation or evolutionary perspective states that:

change often is a result of adaptations and decisions made by users as they work with particular new policies or programs, with the policy or program and the user’s situation mutually determining the outcome (Fullan & Stiegelbauer. 1993).

Sarason (1990). categorized innovations as first and second order changes. First order changes improve efficiency and effectiveness of what is currently done not altering how people perform their roles. First order changes tend to ignore school culture, creating superficial change. Second order changes alter the fundamental way in which the organization is put together, which includes the creation of new goals, structures, roles, affecting the culture and structure of the organization, restructuring roles and reorganizing responsibilities. In second order changes totally new roles and a new organizational culture are created (Argyris, 1993; Argyris & Schön, 1978; Patton, 1997). According to Fullan and Stiegelbauer (1991), “transformation of subjective reality is the essence of change” (p.36), which in turn results in the creation of a new organizational culture.

Defining the objective reality of innovations will move us one step closer to an understanding of the nature of educational change, which in my view is an essential precondition for formulating our own subjective response to the question of when change is progress. (p. 36)

They continue:
Reality is always defined by individuals and groups. But individuals and groups interact to produce social phenomena (constitutions, laws, policies, educational change programs), which exist outside any given individual. There is also the danger that the objective reality is only the reflection of the producers of change and thus simply a glorified version of their subjective conceptions. (p.37)

2.1.4 Change Agency

In the educational leadership literature, the educator as a change agent is a well-established concept. For Fullan (1994) “each and every educator must strive to be an effective change agent” (p.13). Change agency involves being self conscious about the nature of change and the change process (Fullan, 1993). It requires from the teacher constant reflection about what conceptions and skills should the teacher posses in order to become a more effective change agent. The four core capacities in a change agent that promote change are: 1) personal vision-building, 2) inquiry, 3) mastery and 4) collaboration. Their institutional counterparts are: 1) shared-vision building, 2) organizational structures, norms and practices of inquiry; 3) focus on organizational development and know how, and 4) collaborative work cultures.

According to Fullan (1995), purposeful change is the “new norm” in teaching. Teachers as educational innovators are individuals committed to the development of social and intellectual capital in students. The capacity for promoting change, personal purpose and vision, comes from within and gives meaning to a teacher’s practice. The capacity of inquiry means internalizing norms, habits and techniques for continuous learning, for lifelong inquiry in a constantly changing environment. The capacity of mastery involves strong undergraduate education, and continuous professional development throughout the career. Mastery is essential, both in relation to specific innovations and as a personal habit. Collaboration, the fourth capacity,
is essential for personal learning. Collaborative skills and relationships are needed to learn and continue to learn as much as needed to be an agent for societal improvement. Change arises from the relationship among these competencies (Fullan, 1993, 1999).

2.1.5 Meaningful Educational Change

Meaningful educational change is understanding the worth of a particular change initiative. The problem of meaning is one of how those involved in the change effort can come to understand the process of “what it is” that should change, and “how” it can be best accomplished. Ultimately, these two processes constantly interact and reshape each other (Fullan & Stiegelbauer, 1993).

The search for meaning in educational change has been addressed by various educational researchers (Fullan & Stiegelbauer, 1993; Sergiovanni, 1992b; Boyer, 1990; Willimon & Naylor, 1995; Lucas, 1996). Fullan and Stiegelbauer (1991), state that meaningful educational change comes through the development of shared meaning. Shared meaning is the interface between individual and collective meaning and action in everyday situations.

...individuals and groups working together have to become clear about new educational practices that they wish (and/or someone else wishes them) to implement. This is meaning, if you will, about the content and theory of educational practice... obtaining meaning about the desirability and workability of specific educational practices is the question of how new practices are introduced. The latter concerns the theory of change—a complex social process in which people have just as many problems understanding what is happening and why. (p.46)

There is a major difference between how change is experienced and how change was intended. Argyris (1982), has emphasized the importance of differentiating espoused theory from theory in use. The espouse theory is what people say they do.
that is, the official version of how the organization operates. The theory in use is what really happens. The analysis can include comparing the theory in use with the espoused theory to describe a model in realistic terms (Patton, 1990). Formulating a program theory of action depicts in concrete terms how inputs and activities are related to outcomes and impacts to constitute a holistic program model (Argyris, 1993). There is a need to examine individual and collective situations that deal with the "what" and "how" of change. For many proponents of change, the essence of change is understanding the objective reality and transforming of subjective realities. Therefore, defining the objective reality of innovations will move us one step closer to understanding the nature of educational change (Fullan, 1993; Senge, 1990; Bennis & Nanus, 1985; Bennis & Goldsmith, 1994).

2.1.6 Theory of Action

Chris Argyris and Donald Schöen (1974) from their work of organizational development, derived the notion that people in programs operate on the basis of theories of action. They argued that when theories of action were attributed to human beings all deliberate action had a cognitive basis, “that it reflected norms, strategies, and assumptions or models of the world which had claims of general validity” (p. 10). They added that human learning needed to be understood as the construction, testing, and restructuring of a certain kind of knowledge. And that, “human action and human learning could be placed in the larger context of knowing” (p. 10). Therefore, human beings needed to become competent in taking action and simultaneously reflecting on their action to learn from it.
There are different ways of looking at organizations, one of them is as a theory of action. In an organization individuals decide and act, but they do these things for the organization by virtue of the rules of 1) decision—making decisions in the name of the collectivity, 2) delegation— authority to act for the collectivity, and 3) membership—setting boundaries between the collectivity and the rest of the world. Member’s behavior is rule-governed. Rules govern the behavior of individuals (Argyris & Schön. 1978).

Argyris and Schön (1978) distinguished a theory-of-action as a theory of deliberate human behavior that referred to how to produce desired results. Argyris (1982) emphasized the importance of differentiating espoused theory from theory-in-use. The espoused theory is what people say or believe they do; it is the official version of how the organization operates. The theory-in-use is what really happens in an organization, the bases on which people actually act, the theory that actually governs their actions. The espoused theory of action is “a straightforward articulation of what is supposed to happen in the process that is intended to achieve desired outcomes” (p.85). The linkages between processes and outcomes are made explicit. People do not always behave congruently with their beliefs, values, and attitudes which are part of the espoused theories. Although people do not behave “congruently with their espoused theories, they do behave congruently with their theories-in-use, and they are unaware of this fact” (p.85).

Formulating a program’s theory of action depicts in concrete terms how inputs and activities are related to outcomes and impacts, to constitute a holistic program model (Argyris & Schön, 1978). Theories of action are governed by a set of values that provide the framework for the action strategies chosen (Argyris, 1993). Theories
of action are specific to a particular program or organization. The models of action theories can be grounded and constructed, from the directly observable data of behavior, which guided interpersonal behavior. Clarifying the theory of action means specifying how programs staff believe what they do will lead to the desired outcomes step by step (Argyris, 1993).

An organization’s theory-of-action is a complex system of norms, strategies, and assumptions for achieving its objectives, embedded in the organization’s practices. The theory-of-action include performance norms, strategies for achieving norms, and assumptions that bind strategies and norms together. The theory-of-action includes: 1) patterns of communication and control. 2) ways of allocating resources to goals. 3) and provisions for self-maintenance.

Patton (1998) presents the procedure used to create a program theory of action. To reveal the espoused theory of an organization, researchers interview the senior staff of the organization and analyze official documents. Whereas, to reveal the theory-in-use, researchers interview participants or front-line staff, and observe directly the program in use. An analysis of and organizations theory-in-use versus the organizations espoused theory was used to create a realistic model of a specific organization’s life, the theory of action of the organization (Patton, 1997).

2.1.7 Organizational Learning

Organizational learning is a process that involves the detection and correction of error. An error in a systems schema occurs when there is a mismatch of outcome to expectation. Individuals in the organization are the agents for organizational action and learning. In organizational learning error correction takes the form of inquiry
in which the organizational members discover the sources of error by reviewing the strategies and assumptions in the existing theory-in-use (Argyris & Schön, 1978).

Organizational learning is a process mediated by the collaborative inquiry of individual members, who restructure the organizational theory in use, and the results of their inquiry are recorded in the media of organizational memory, the images and maps which encode organizational theory-in-use. Argyris and Schön (1978), state that:

In order for organizational learning to occur, learning agent's discoveries, inventions, and evaluations must be embedded in organizational memory. They must be encoded in the individual images and the shared maps of organizational theory-in-use. (p. 19)

As organizational members respond to changes in the internal and external environments of an organization, they increase the organization's ability to remain stable in a changing context. This kind of learning can be single-loop or double loop learning. In single-loop learning members of the organization carry out a collaborative inquiry through which they discover sources of error, invent new strategies designed to correct error, produce those strategies, and evaluate and generalize the results. When the error detected and corrected permits the organization to carry on its present policies or achieve its present objectives, then that error detection-and-correction process is single-loop learning (Argyris & Schön, 1978). Double-loop learning occurs when error is detected and corrected in ways that involve the modification of an organization's underlying norms, policies, and objectives, in other words the organization’s schema. Double-loop learning consists of a change in organizational norms and a change in the organization’s schema (Argyris & Schön, 1978).
2.1.8 Organizational Development and the Nature of Change

Regardless of the type of change being pursued, organization development (OD) follows a multiple step process. To gain insight into the way of the organizational process Lewin’s development model can be used. According to Lewin’s model, organizational development progresses through stages of: 1) unfreezing, 2) transforming (or moving), and 3) refreezing. Unfreezing, is a preparatory step in which old attitudes, values, and behaviors are weakened to get people ready for change. New and different experiences or information that challenge routine perceptions facilitate the process by increasing awareness and encourage the questioning of current behaviors and attitudes. The less satisfied people are with the status quo, the more likely the feeling of the necessity of change. Transforming, is the step in which change actually occurs. In this step organizational members begin to internalize the values of the organizational development, and start to adopt new attitudes and behaviors. This process often requires facilitation, in which the change agent help members to understand why change is necessary; and training in which members learn how they will be affected by the change, and what will be expected of them after the change has taken place.

Refreezing focuses on institutionalizing change. The change that took place during the transforming step becomes stable and permanent. During refreezing, new attitudes, values, and behaviors are integrated into everyday organizational processes and procedures. Refreezing does not imply rigidity or resistance to future change. Due to the success of the experience the organizational members learn not to fear change (Cummings & Worley, 1997).
2.1.9 Summary

American higher education is very diverse and varied. As society changes, there is a need for change in academia. The main crisis in American higher education is that of the purpose of the university. As the purpose of higher education change, academia must change its way of conducting education. Productive educational change is the ability to survive planned and unplanned change. Educational innovations are those practices and programs that help students develop the capacity to become moral change agents in society (Fullan, 1999; Lucas, 1996). The substance of educational change is to help students accomplish changes in goals, skills, philosophy, beliefs, and behaviors. In education, the beliefs are the pedagogical assumptions, and theories underlying particular policies, programs and practices. Therefore, the most difficult aspect of change in education is alteration of beliefs, because it challenges the core values held by individuals regarding the purposes of education.

For Fullan and Steigelbauer (1991), educational change in practice has to occur along three dimensions 1) educational materials, 2) educational techniques and 3) basic assumptions about the innovation. Educators as change agents promote change in four dimensions: 1) personal vision-building, 2) inquiry, 3) mastery and, 4) collaboration. Change in education occurs both at the individual and organizational level. Organizational change may produce the conditions to foster an individual's change. Organizational changes are often necessary to provide supportive or stimulating conditions to foster individual change in practice (Fullan, 1993; Argyris, 1993; Argyris & Schön, 1978; Patton, 1997).

Argyris and Schön (1978) distinguished a theory-of-action as a theory of deliberate human behavior that referred to how to produce desired results. Theories of
action are governed by a set of values that provide the framework for the chosen action strategies (Argyris, 1993). An organization’s theory-of-action is a complex system of norms, strategies, and assumptions for achieving its objectives, embedded in the organization’s practices. The theory-of-action include performance norms, strategies for achieving norms, and assumptions that bind strategies and norms together. Patton (1998) states that an analysis of an organization’s theory-in-use versus the organization’s espoused theory is used to create a realistic model of a specific organization’s life, the theory-of-action of the organization (Patton, 1997).

The change process often requires facilitation, in which the change agent helps members to understand why change is necessary; and training in which members learn how they will be affected by the change, and what will be expected of them after the change has taken place. As organizational members respond to changes in the internal and external environments of an organization, they increase the organization’s ability to remain stable in a changing context. It is necessary to engage in double-loop learning in order to evolve. Double-loop learning consists of a change in organizational norms and a change in the organization’s schema (Argyris & Schön, 1978).

2.2 Systems, Chaos, and Complexity Theory

According to Bohm (1992), a system is a set of connected things or parts which are constantly engaged in a process of development, structure change and evolution, although some features of the system become relatively fixed. Changes in one part of the system lead to changes among all parts, changing the system itself. A system is a perceived whole whose elements “hang together” because they continually affect each other over time and operate toward a common purpose. A system is a whole
that is both greater than, and different from its parts. The system’s parts are so interconnected and interdependent that any simple cause-effect analysis are distorted representations of the system. (Patton, 1990; Capra, 1996).

According to Wheatley (1999).

A system is composed of parts, but we cannot understand a system by looking only at its parts. We need to work with the whole of a system, even as we work with individual parts or isolated problems. (p. 139)

The systems perspective is one in which the world is viewed as whole entities, embedded in specific context and in larger wholes (Stacey, 1996; Capra, 1996). A systems perspective includes the perceptions with which the observer, causes it to stand together (Senge, Kleiner, Roberts, Ross, & Smith, 1994). Holistic thinking is central to the systems perspective. To Wheatley (1999).

...several ways to sense the whole... we can discover the whole by going further into its parts. We inquire into the part as we hold the recognition that it is participating in a whole system. We hold our attention at two levels simultaneously. We recognize that this one thing we are studying is only there because of the rest of the universe (see Bortof 1996, 6). We can understand the whole by noting how it is influencing things at this local level. (p. 141)

2.2.1 Chaos Deterministic Systems

Chaos theory studies the fundamental properties of nonlinear deterministic systems. A system is nonlinear when actions can have more than one outcome and when actions generate non proportional outcomes, in other words, when the whole is more than the sum of its parts (Stacey, 1996; Gleick, 1987; VanderVen, 1997). Chaos, is the term used to describe unpredictable and apparently random behavior in dynamical deterministic systems. A dynamical system is one whose properties change with time. Determinism is the doctrine that events are completely determined by previous causes.
rather than being affected by free will or random factors (Coveney & Highfield, 1995). According to Coveney and Highfield (1995), the scientific usage of chaos differs from everyday language since under the chaos theory perspective the term chaos has rules. The classical scientific view of the world as orderly, rational, predictable and controllable is being challenged by chaos and complexity theory (Kellert, 1993; Kauffman, 1995; Nicolis & Prigogine, 1989; Mainzer, 1994; Holland, 1998). According to Kellert (1993):

Chaos theory argues against the universal applicability of the method of micro-reductionism, but not against the validity of the philosophical doctrine of reductionism. That doctrine states that all properties of a system are reducible to the properties of its part. (p.89).

In sum, chaos theory is the study of unstable aperiodic behavior in deterministic nonlinear dynamical systems and is concerned with disequilibrium, complexity and unpredictability (Kellert, 1993; Stacey, 1996; Fullan, 1999).

### 2.2.2 Complex Adaptive Systems

The science of complexity studies the fundamental properties of nonlinear-feedback networks and particularly of complex adaptive systems (CAS). The study of complex systems or the complexity theory perspective is a rigorous and formal attempt to deal with the issue of emergent wholes (Kauffman, 1995; Holland, 1998, 1995; Capra, 1996; Wheatley, 1999). According to Lewin (1999).

It’s essentially meaningless to talk about a complex adaptive system being in equilibrium: the system can never get there. It is always unfolding, always in transition. In fact, if the system ever does reach equilibrium, it isn’t just stable, “It’s dead.” In short, complex adaptive systems are characterized by perpetual novelty. (p.147)

According to Stacey (1996). The science of complexity proposes that in systems:
1. the link between cause and effect is difficult to trace.

2. change, planned and otherwise, unfolds in nonlinear ways.

3. paradoxes and contradictions abound

4. creative solutions arise out of interaction under conditions of uncertainty, diversity and instability.

A complex adaptive system is an open system that entrains information. The system’s response is to learn and change as it acts on the environment and assimilates new information, demonstrating regularities (Stacey, 1996; Lissack, 1999). Entrainment is a combination of the notion that separate entities become juxtaposed or connected in ways that form new combinations and coherent patterns, that is, two or more systems join to become a larger synchronous system (Stacey, 1996; VanderVen, 1997).

Stacey (1996) states that:

A complex adaptive system consists of a number of agents interacting with each other according to schemas, that is, rules of behavior, that require them to inspect each other’s behavior and adjust their own in the light of the behavior of others. In other words, complex adaptive systems learn and evolve, and they usually interact with other complex adaptive systems. They survive because they learn or evolve in an adaptive way: they compute information in order to extract regularities, building them into schemas that are continually changed in the light of experience.

Human systems are complex adaptive systems. According to Stacey (1996), complex adaptive systems operate in a manner that constitutes learning. CAS are learning systems that operate in environments that consist mainly of other learning systems, tending to form a co-evolving supra-system that creates and learns.
According to Stacey (1996) there are a number of key features that CAS follow. A complex adaptive system:

- has a basic purpose of performing tasks and surviving.
- consists of networks of large numbers of interacting agents.
- interacts with an environment consisting primarily of other systems, coevolves.
- interacts in an iterative, nonlinear manner.
- acquires information about the systems constituting its environment and information about the consequences of its own interaction with those systems by employing feedback.
- discovers the responses its action provokes, as well as the consequences of those responses; and uses this information to adapt its behavior to perform simple or single-loop learning or revises its schema so as better to adapt to perform complex or double-loop learning.
- agents have unique individual schemas but their behavior is conditioned by a common culture, a schema shared with all or some other agents.
- schemas consist of a number of rules: simple reaction rules; more complex rules requiring formation of expectations and taking anticipatory action; performance evaluation rules and; rules for evaluating schema rules themselves.

One of the major concepts of complexity theory is emergence (Holland, 1998; Lissack, 1999). Emergence refers to the arising of novel and coherent structures, patterns, and properties during the process of self-organization in complex systems.
Emergent phenomena are conceptualized as occurring on the macro level, in contrast to the micro level components and processes out of which they arise. Explanations that include the construct of emergence contain that emergent phenomena are neither predictable from, deducible from, nor reducible to the parts alone. Emergence is a descriptive term pointing to the pattern exhibited on the macro-level. Its only a foundation on which to build an explanation not its terminus, which is, that of uncovering the many factors involved in the coming forth of emergent phenomena. According to Goldstein (1999), the properties that identify systems as emergent are:

- Radical novelty- have features that were not previously observed in the CAS under observation: these features are neither predictable nor deducible.

- Coherence- integrated wholes that maintain some sense of identity over time.

- Global or macro-level- emergent phenomena is observed at the macro level where it occurs, rather than the micro level where its characterized by its components.

- Dynamical- are not pre-given wholes but arise as a complex system evolves over time.

- Interplay between the parts and the whole that has been emphasized in studies of complex, self-organizing systems.

- Whole before its parts- connotes a pre-given coherent entity whereas emergence is not pre-given but, a dynamical construct.

- Nonlinearity: small cause and large effect, intense focus of nonlinear interactivity found in emergent phenomena.
• Self-organization: creative, self-generated, adaptability-seeking behavior of a complex system.

• Beyond equilibrium (multi-, non-, or far-from-equilibrium): interested in the beyond equilibrium conditions that foster emergence, being the manner in which far-from-equilibrium conditions allow for the amplification of random events.

2.2.3 Paradigm Shift

The Cartesian method of analytic thinking consists of breaking up complex phenomena into parts to understand the behavior of the whole from the properties of its parts (Capra, 1996). The belief that in every complex system the behavior of the whole can be understood entirely from the properties of its parts is central to the Cartesian paradigm. Under this paradigm the world is looked through analytical lenses, fragmenting reality into an endless series of either-ors, a concept Palmer (1997) calls "thinking the world apart".

Researchers have used a linear worldview to describe the world by breaking complex entities into small component parts so they could be easily understood, and controlled. Classical linear theory is sequential, uses a reductionist methodology of control and predictability. A major assumption under this paradigm is that the point of research is to identify how a system might be controlled, how it might be intentionally redesigned so that it operates efficiently and effectively (Stacey, 1996; VanderVen, 1999; Mainzer, 1994; Damasio, 1994; Capra, 1996).

For a systems theorist, the behavior of the whole is more than the simple sum of the behavior of its parts (Holland, 1995). According to Capra (1996), living systems cannot be understood by analysis since living organisms, do not perceive things in
terms of isolated elements but as integrated perceptual patterns—meaningful organized wholes. These wholes exhibit qualities that are absent in their parts. The properties of the parts are not intrinsic properties, but can be understood only within the context of the larger whole. Wheatley (1999) states that:

To study a problem from this sensibility requires us to explore the relationship between the part and the whole... here we look intently at the part in order to see the dynamics operating in the whole system. The part is not the whole, but it can lead us there. (p. 142)

The emphasis on the parts has been called mechanistic or reductionist: the emphasis on the whole holistic, organismic, or ecological. The holistic perspective has become known as systemic and the way of thinking it implies as systems thinking (Capra, 1996; Patton, 1990). In doing research using the systems approach, the properties of the parts can be understood only from the organization of the whole (Capra, 1996; Patton, 1990). Analysis means taking something apart in order to understand it; systems thinking means putting it into the context of a larger whole. Systems cannot be understood by analysis. In the change from the classical to the ecological paradigm, the basic tension is one between the parts and the whole.

The problems of the postmodern society, whether ecological economic, political or societal are global, complex and nonlinear (Mainzer, 1994; Wheatley, 1994, 1999). A system needs to inquire into the domains of identity, information, and relationships, to becomes self-aware (Wheatley, 1999). A new way of perceiving the world is emerging, one that comprehends its processes of change, patterns, relationships and connections. This new view is the science of complexity (Mainzer, 1994).

The study of systems has encouraged a paradigm shift from classical Newtonian linear world view to complexity theory world view (Stacey, 1996). A comparison
Table 2.1: Key Concepts of Linear vs. Complex World Views

<table>
<thead>
<tr>
<th>Linear World View</th>
<th>Complexity World View</th>
</tr>
</thead>
<tbody>
<tr>
<td>Desires simple, rational solutions to problems.</td>
<td>Recognizes complexity of situations and change.</td>
</tr>
<tr>
<td>Amount of input is directly proportional to expected output.</td>
<td>Recognizes that many occurrences are sudden and unpredictable.</td>
</tr>
<tr>
<td>Effective action is sequential, one step after another.</td>
<td>A small input may have a greater output.</td>
</tr>
<tr>
<td>Entities are additive: more is essentially better.</td>
<td>The reality of action is non-sequential.</td>
</tr>
<tr>
<td>Values stability and as ideal states.</td>
<td>Values change, emergence and self-organization.</td>
</tr>
<tr>
<td>Variables are not affected by context.</td>
<td>Variables are affected by and affect their context.</td>
</tr>
<tr>
<td>View entities and phenomena as a unity.</td>
<td>Recognizes edge-of-chaos as a desirable state.</td>
</tr>
<tr>
<td>Takes apart to understand component parts (reductionism).</td>
<td>Views entities and phenomena holistically to seek pattern.</td>
</tr>
<tr>
<td>Addresses problems by direct control.</td>
<td>Recognizes connections among system components.</td>
</tr>
<tr>
<td>System affected only by external forces.</td>
<td>System affected and changed by internal and external forces.</td>
</tr>
</tbody>
</table>

of the basic concepts of these two world views is presented in 2.1 as adapted from VanderVen (1999).

The paradigm shift to complexity world view requires an expansion of perceptions, ways of thinking and values. In this new paradigm, what is good, or healthy, is a dynamic balance; what is bad, or unhealthy, is imbalance over emphasizing one tendency and neglecting of the other (Capra, 1996).

Complexity theory views systems as open, dynamic and constantly changing. It provides ways to conceptualize and model specific processes in ways. This framework provides a heuristic scheme for constructing models of nonlinear complex systems.
both in the natural and social sciences (Mainzer, 1994; Cavanaugh & McGuire, 1994; Holland, 1995). Theory of nonlinear complex systems cannot be reduced to special natural laws of physics (Mainzer, 1994). Complexity theory seeks to understand and model the nonlinear relationships within systems. Stacey (1996), states that:

The implicit theory of causality is that the system is driven by laws in which the casual link between specific action and specific outcome can be identified to some useful degree. What the science of complexity adds is a different theory of causality, one in which creative systems are subject to radical unpredictability, to the laws of the connection between action and long term outcomes. (p.264)

The science of complexity adds a coherent theoretical framework within which researchers can understand self-organization and emergence and conduct appropriate research (Stacey, 1996). The purpose of the theory of complexity and the research is then, to indicate how conditions might be established within which spontaneous self-organization might occur to produce emergent outcomes. As with all new paradigms, the concepts of complex nonlinear dynamics, and self-organizing systems allow investigators to explore a variety of areas from new angles that may have never been considered before (Capra, 1996; Nicolis & Prigogine, 1989).

Wheatley (1999), states that:

Individual behaviors co-evolve as individuals interact with system dynamics... we have to inquire into individual behavior to learn about the whole. (p.142)

### 2.2.4 Complexity Theory and Organizations

During the last six years organizational theorist have been using complexity theory to study and understand organizational change (Wheatley, 1994, 1999; Stacey, 1992, 1996; Torre, 1995). According to Stacey (1996), the underlying assumptions of most
management practices are that a competent system is one that consists of a detailed set of deterministic rules. Such system is designed for an environment that does not change, therefore it will be a competent and successful system. That is not the case with the new understanding of deterministic systems. This understanding tells us that we can get such a system only if what we want is an endless repetition of what it has already done. However, human systems are not deterministic. They are adaptive, and it is impossible to treat an adaptive system as a deterministic system. Management under such circumstances will be doom to failure because its basic premises and assumptions are incorrect.

Complexity theory challenges the traditional management assumptions by noting that human activity allows for the possibility of emergent behavior (Lissack, 1999). This paradigm provides a new way of thinking about organizations. Its value will be a function of its ability to solve problems and understand phenomena more effectively than competing paradigms. The complex systems approach can not explain what is life, but it can show how complex and sensitive life is (Mainzer, 1994).

In the study of organizations, scholars are beginning to focus on the organizations capability for self-organization and self-renewal. This is based on the assumption that the system possesses the capacity for spontaneously emerging structures, depending on what is required at any point in time. Change does not occur randomly, it is always consistent with what has gone on before, the system changes in a way consistent with itself in the environment (Wheatley, 1994, 1999).

According to Wheatley (1994), leadership is always dependent on the context, but the context is established by the relationships we value. Using the complexity theory perspective, organizational theorists focus attention on relationships, by looking at
the structures that might facilitate relationships in organizations. According to Stacey (1996), a complexity theory of organization is built on the following propositions:

- All organizations are webs of nonlinear feedback loops connected to other people and organizations (its environments) by webs of nonlinear feedback loops.

- Such nonlinear feedback systems are capable of operating in states of stable and unstable equilibrium, or in the borders between these states, that is far-from-equilibrium, in bounded instability at the edge of chaos.

- All organizations are paradoxes. They are powerfully pulled towards stability by the forces of integration, maintenance controls, human desires for security and certainty, and adaptation to the environment on the one hand. They are also powerfully pulled to the opposite extreme of unstable equilibrium by the forces of division and decentralization, human desires for excitement and innovation, and isolation from the environment.

- If the organization gives in to the pull to stability it fails because it becomes ossified and cannot change easily. If it gives in to the pull to instability it disintegrates. Success lies in sustaining an organization in the borders between stability and instability. This is a state of chaos, a difficult-to-maintain dissipate structure.

- The dynamics of the successful organization are therefore those of irregular cycles and discontinuous trends, falling within qualitative patterns, fuzzy but recognizable categories taking the form of archetypes and templates.
• Because of its own internal dynamic, a successful organization faces completely unknowable specific futures.

• Long-term development is a spontaneously self-organizing process from which new strategic directions may emerge. Managers have to use reasoning by analogy. (p. 349)

2.2.5 Complexity and Higher Education

In academia, to successfully accomplish change, the observable task and structures of the organization must be changed as well as the organizational culture and the people within. (Bennis & Nanus, 1985; Wellins, Byham, & Wilson, 1991; Kouzes & Posner, 1995; Ott, 1989). Palmer (1998) points out that the academic habit of competitive conversation, where you "tell me your thesis and I will find any way to argue the other side", is rooted in the fact that academicians look at the world through analytical lenses, using a paradigm that fragments reality into an endless series of either-ors, thinking the world apart. But, a rational person keeps his mind open so that his present viewpoints and positions can be revised in the light of new evidence (Chambers, 1983). According to Wheatley (1999), organizational members are refocusing on the deep longings they have for community, meaning, dignity and love in their organizational lives.

According to Cutright (1999), institutions of higher education planning in higher education using a complexity theory framework yields the following outcomes:

1. The ideal outcome of planning is planning, not a plan.

2. Planning begins with a distillation of the institution's key values and purposes.
3. Dissent and conflict are creative, healthy, and real. The absence of conflict is reductionist, illusory, and suspect.

4. The future is a creation, not a prediction. This power of agency is the distinguishing context of human chaotic systems.

2.2.6 Program Design and Pedagogy

Currently, rapid and transformational change in society requires of education to promote attributes for both creating and adapting to the future (Fullan, 1993; VanderVen, 1999). Complexity theorists propose certain attributes that can serve as the basis for educational program design, delivery and pedagogy based on a synthesis of the ideas of nonlinear adaptive systems. Non-linear dynamical systems theory is a form of scholarship that identifies attributes needed of students in the near future to create and adapt to constant change. These complex dynamics can contribute to the emergence of a student with the potential to become a creative member of society. VanderVen (1999), proposes the use of that students would have the capacity to:

1. Self-regulate, to maintain one’s center and focus in a shifting context.

2. Function as a contributing and adaptive member of an entrained, synchronized system.

3. Think systematically to recognize interdependence among components of a situation or phenomenon.

4. Integrate, to see pattern across formally bounded situations and occurrences.

5. Improvise and create new combinations out of dissipate elements or components.
6. Anticipate and respond flexibly to unpredictability, sudden change and surprise.

7. Be reflexive, to be able to look at one's experience and utilize it in planning one next actions.

8. See the possibility of paradox in the outcomes of apparently logical interventions into ordinary situations.

9. View phenomena and situations as emergent and evolutionary, changing various ways over time.

10. Be proactive by constructing one's own life and meaning, thereby creating weak chaos and contributing to the continued evolution of humankind.

11. Utilize metacognition to become aware of one's own thinking processes and actions and to develop and apply them.

Many complex systems show coherence in the face of change. Coherent and persistence of each system depends on extensive interactions, the aggregation of diverse elements, and adaptation or learning (Holland. 1998). A small input can produce major predictable directed changes and amplifier effects.

The teacher, as an educational change agent, is able to develop new teaching skills and approaches using the program design guidelines. Creative activities in the curriculum provide a context for application, practice and integration of all forms of knowledge. Knowledge creation is the ability to generate and learn new ideas (Fullan. 1999; VanderVen. 1999; Brown, A., & Duguid. 1995; Jarvis, 1999). This knowledge can bifurcate into more complex forms. The complexity theory's proposal
of program design, delivery and pedagogy, will contribute to the emergence of the student's potential.

Complexity theory provides powerful guidelines for student development in graduate school. Graduate school is a critical agency in developing the capacity of individuals to pursue higher moral purpose under conditions of great complexity. The intensive diverse human interaction fostered in graduate school involving different people provides an advantage to the emergence of the student's potential because: interaction is essential to solving problems and diversity of interaction is most suited to discovering moral and effective solutions to problems presented by turbulent complex environments (Fullan, 1999).

2.2.7 Learning at the Edge of Chaos

Complexity theory can be used to understand and cope with change (Wheatley, 1999; VanderVen, 1999). A key concept of complexity theory postulates that change occurs at the edge of chaos. The edge of chaos is a form of bounded instability found in the phase transition between the order and disorder zones of operation for a complex adaptive system.

A system at the edge of chaos is also called a system in a state far-from-equilibrium. When a system is held at the edge of chaos, the consequence is not necessarily randomness and anarchy because the edge also has an inherent order brought about by redundancy and cooperation. Cooperation does not occur due to some prior intention, it is a bottom up process in which agents follow their own best self interest without waiting to be told from above. Such self-organization produces emergent strategies, the interaction itself creates patterns that no agent individually intends or
can foresee (Stacey, 1996). A system at the edge of chaos is viewed favorably because it is in a state capable of change. Learning occurs at the edge of chaos.

According to Fullan (1999), the elements of learning at the edge of chaos include:

- the guidance of moral purpose,
- a small number of key priorities, and
- a focus on knowledge and data arising from shared problem solving and assessment of results

Learning at the edge of chaos does not mean accepting anarchy. Really chaotic or anarchical systems have no direction, unclear responsibilities, random communication, limited purposeful experimentation, and consequently no learning. Learning at the edge of chaos has both structure and openness.

According to Brown and Eisenhardt, cited in Fullan (1999), learning at the edge of chaos involves the need to:

- foster a culture of frequent change in the context of a few strict rules;
- keep most activity loosely structured but rely on critical structure points of priorities, targeted measures, real deadlines and responsibilities for major outcomes;
- create channels for real-time fact-based communication within and across groups.

Conceptions in complexity theory have potentially far-reaching implications for studying human development and may provide a context for understanding life long learning.
(Cavanaugh & McGuire, 1994). Therefore, learning at the edge of chaos becomes the central tenet to create a learning organization.

Argyris (1984), states that:

To intervene is to enter into an ongoing set of relationships for the purpose of being of help. The kind of help in which we focus is to increase the capacity for good organizational dialectic—that is, the capacity for organizational inquiry which engages those mistakes, incongruities, and incompatibilities in organizational theory of action which necessarily emerge as the organization/environment system changes. (p.158)

2.2.8 Change Process, Complexity Theory and Educational Change

Under the complexity paradigm, organizations are viewed as living systems, whose main role is that of knowledge creation and innovation. Knowledge creation is the ability to generate and learn new ideas. Organizations go through the evolutionary process of human and organizational change. Each individual and organizational situation is complex, unique, multidimensional and contextual. Change often is not conceived of as being multidimensional. Therefore, there is a need to examine individual and collective situations that deal with the what and how of change in organizations.

According to Fullan (1993), there has been a paradigm breakthrough in how to think and act in relation to change. In this new mindset for change:

The goal then is to get into the habit of experiencing and thinking about educational change processes as an overlapping series of dynamically complex phenomena. (p.21)

According to Senge (1990) in the new change paradigm, dynamic complexity is seen as the territory of change, that is, when cause and effect are not close in time and space, interventions do not produce expected outcomes due to other unplanned
factors that dynamically interfere. Productive change is considered a search for understanding in which seeing interrelationships, and processes of change are primary (Senge, 1990).

Michael Fullan, in his books Change Forces (1993), and Change Forces: The Sequel (1999), provides a view of educational organization change using chaos and complexity theory. In terms of educational organization change, Fullan proposed in 1993, eight “Basic Lessons” learned on the field, which were then modified in 1999, into eight “Complex Lessons.” The lessons go together as a set, since no one lesson by itself would be useful. Thus, each lesson benefits from the others.

Following are the eight “Basic Lessons” that arose from the new paradigm of dynamic change:

1. You can’t mandate what matters. (The more complex the change the less you can force it.)
2. Change is a journey not a blueprint (Change is non-linear, loaded with uncertainty and excitement and sometimes perverse).
3. Problems are our friends. (Problems are inevitable and you can’t learn without them.)
4. Vision and strategic planning come later. (Premature visions and planning blind.)
5. Individualism and collectivism must have equal power: (There are no one-sided solutions to isolation and group-think.)
6. Neither centralization nor decentralization works. (Both top-down and bottom-up strategies are necessary.)
7. Connection with the wider environment is critical for success. (The best organizations learn externally as well as internally.)
8. Every person is a change agent. (Change is too important to leave to the experts, personal mind set and mastery is the ultimate protection.) (Fullan, 1993, p. 21-22)
According to Fullan (1993), the pattern underlying the eight lessons of dynamic change is the ability "to work and synthesize polar opposites, for example, pushing for change while allowing self-learning to unfold." (p.40)

In his book *Change Forces: The Sequel* Fullan (1999) states that the basic lessons still hold in 1999, but he modified them into the set of complex change lessons. The complex change lessons are based on theoretical advances made in understanding the dynamics of living systems and knowledge creation since 1993, that "have provided a much deeper and more coherent basis for understanding and acting in complex change situations." (p. 18)

Following are Fullan's eight "Complex Change Lessons":

1. Moral purpose is complex and problematic.
2. Theories of change and theories of education need each other.
3. Conflict and diversity are our friends.
4. Understand the meaning of operating on the edge of chaos.
5. Emotional intelligence is anxiety provoking and anxiety containing.
6. Collaborative cultures are anxiety provoking and anxiety containing.
7. Attack incoherence: connectedness and knowledge creation are critical.
8. There is no single solution: craft your own theories and actions by being a critical consumer. (p. 18)

Fullan (1999) emphasized that the eight lessons only have power in combination and states the value of the lessons.

As these lessons are internalized, the reward is that they can become an indispensable guide to thinking about and acting effectively in the face of complex and chaotic change. (p. 29)

There is a distinction between a theory of education and a theory of change. Although the distinction is not absolutely pure, it is useful to examine change efforts
in educational organizations in terms of their theories of education, and their theories of change or action. For example in the educational domain, what pedagogical assumptions and associated components are essential to the model: and in terms of change, what strategies are formed to guide and support implementation. Many educational reformers with well worked-out theories without the supporting components of change theory, are nonplused to find that their valuable ideas are ignored or misused in practice (Fullan, 1999).

Chaos and complexity theory provides a new lens with which educational institutions can be viewed as learning organizations. The complexity view can be used in education as a basis for educational design, delivery and pedagogy. The future of educational change is in the creation of learning communities, learning organizations with organizational cultures where the interconnection of relationships is valued. The development of a shared understanding of what personal mastery is and, what its role is in introducing us to and preparing us for the work of collective learning.

2.2.9 Summary

A system is composed of parts, but we cannot understand a system by looking only at its parts (Wheatley, 1999). The systems perspective is one in which the world is viewed as whole entities embedded in a context and still in a larger whole (Stacey, 1996: Capra, 1996). Changes in one part of the system lead to changes among all parts, changing the system itself (Patton, 1990: Capra, 1996).

Chaos theory studies the fundamental properties of nonlinear deterministic systems while complexity theory studies the fundamental properties of nonlinear-feedback networks and particularly of complex adaptive systems (CAS). This is a rigorous and
formal attempt to deal with the issue of emergent wholes (Kauffman. 1995: Holland. 1998. 1995: Capra. 1996; Wheatley. 1999). All human systems are CAS. A complex adaptive system is an open system that entrains information, responds to it by learning, continuing to change as it acts on the environment and assimilates new information, demonstrating regularities (Stacey. 1996: Lissack. 1999).


The Newtonian or linear paradigm consists of breaking up complex phenomena into parts to understand the behavior of the whole from the properties of its parts (Capra. 1996). The belief that in every complex system the behavior of the whole can be understood entirely from the properties of its parts is currently being challenged by the complexity paradigm. For a systems theorist the behavior of the whole is more than the simple sum of the behavior of its parts (Holland. 1995). Living systems cannot be understood by analysis. The properties of the parts are not intrinsic properties, but can be understood only within the context of the larger whole.

Complexity theory views systems as open, dynamic and constantly changing. The purpose of the theory of complexity and the research is to indicate how conditions might be established within which spontaneous self-organization might occur to produce emergent outcomes. As with all new paradigms, the concepts of complex nonlinear dynamics, and self-organizing systems allow investigators to explore a variety
of areas from new angles that may have never been considered before (Capra, 1996; Nicolis & Prigogine, 1989).

Organizational theorists have been using complexity theory to study and understand organizational change since complexity theory challenges the traditional management assumptions by noting that human activity allows for the possibility of emergent behavior (Wheatley, 1994, 1999; Stacey, 1992, 1996; Torre, 1995; Lissack, 1999). The complexity paradigm provides a new way of thinking about organizations. Using the complexity theory perspective, organizational complexity theorists propose certain attributes that can serve as the basis for educational program design, delivery and pedagogy based on a synthesis of the ideas of nonlinear adaptive systems. Non-linear dynamical systems theory is a form of scholarship that identifies attributes needed of students in the near future to create and adapt to constant change.

The complexity theory’s proposal of program design, delivery and pedagogy will contribute to the emergence of the student’s potential. Complexity theory provides powerful guidelines for student development in graduate school. Complexity theory can be used to understand and cope with change (Gleick, 1987; VanderVen, 1999). A key concept of complexity theory postulates that change occurs at the edge of chaos. The edge of chaos is a form of bounded instability found in the phase transition between the order and disorder zones of operation for a complex adaptive system.

Educational organizations can be viewed as living systems, whose main role is that of knowledge creation and innovation. Knowledge creation is the ability to generate and learn new ideas. Organizations go through the evolutionary process of human and
organizational change. Productive change is considered a search for understanding in
which seeing interrelationships, and processes of change are primary (Senge. 1990).

Complexity theory provides a new lens with which educational institutions can be
viewed as learning organizations. The complexity view can be used in education as a
basis for educational design, delivery and pedagogy. The future of educational change
is in the creation of learning communities, learning organizations with organizational
cultures where the interconnection of relationships is valued. The development of a
shared understanding of what personal mastery is and, what its role is in introducing
us to and preparing us for the work of collective learning.

2.3 Learning Organizations

Peter Senge, (1990) in his book. The Fifth Discipline, introduced the concept
of a learning organization. A learning organization is defined by Senge (1994). as “a
category in the language.” that we use not to describe an existing reality but to create
a framework to construct our reality (p.18). A learning organization is a never-ending
process of learning and personal mastery.

You can never say “we are a learning organization,” any more than you
can say “I am an enlightened person.” The more you learn, the more
acutely aware you become of your ignorance. (Senge. 1990. p.11)

In learning organizations individuals have a shared vision of where they are going.
Members of learning organizations create a space where learning can occur without the
burden of constant evaluation and criticism. This safe-space concept is one in which
people are free to express their ideas and opinions openly without fear of retribution.
The development of a sense of community and the habits and skills of collaboration
among students is also a central tenet of all proposals to develop schools as learning
organizations. Learning organizations create a better place to work, learn and play (Senge, 1990; Kofman & Senge, 1995; Fullan, 1993; Kline & Saunders, 1993; Young, 1994).

The concept of a learning organization is rooted in the practice of five disciplines. Disciplines are a body of theory and technique that must be studied and mastered to be put into practice. A discipline is a developmental path for acquiring certain skills or competencies (Senge, 1990). According to Senge (1990):

To practice a discipline is to be a lifelong learner. You “never arrive”; you spend your life mastering disciplines. (p.11)

The learning organization never achieves a state of permanent excellence. In a learning organization, the more you learn, the more you become aware of your ignorance. You can never say “we are done” (Senge, 1990. p.11). A learning organization is always in the state of practicing the disciplines of learning. These are: 1) personal mastery. 2) mental models. 3) shared vision. 4) team learning and 5) systems thinking. Personal mastery is the practice of becoming aware of who we are as a learner, as a facilitator and ultimately as a leader. Mental models is, to practice examining the mental models of the organization members in order to bring to light their assumptions and beliefs. Shared vision is, to practice a common vision of where the organization is going. Team learning is, to practice becoming interdependent and. systems thinking is to practice seeing wholes, for better understanding of interrelationships and change (Senge, 1990; Ott, 1989; Covey, 1990).

Peter Kline and Bernard Saunders (1993), in their book Ten Steps to a Learning Organization, developed a set of sixteen principles which they believe, constitute a
kind of preview and guide to the changes in attitude and behavior that characterize an emergent learning organization. A learning organization will:

- Prime the minds of individuals at every level to be self-directed:

- Views mistakes as stepping stones to continuous learning and essential to further growth:

- Be willing to rework organizational systems and structures of all types:

- Acknowledge that learning is an emotional process and creates a culture that is a supportive place to be:

- Celebrate the learning process for its own sake, not just its end product:

- Celebrate all learners equally:

- Accomplish as much transfer of knowledge and power from person to person as possible:

- Encourage and teach learners to structure their own learning rather than structuring it for them:

- Teach the process of self-evaluation:

- Recognize and accept as a goal, the complete liberation of all human intelligence everywhere:

- Recognize that different learning preferences are alternate tools for approaching and accomplishing learning:
• Encourage people to discover their own learning and thinking styles and make these accessible to others;

• Cultivate each student’s abilities in all fields of knowledge, and spread the idea that nothing is forever inaccessible to people;

• Recognize that in order to learn something so it is easy to use, it must be logical, moral, and fun:

• Model the belief that ideas can be developed best through dialogue:

• Treat everything as subject to re-examination and investigation. (p.16-18)

2.3.1 Personal Mastery

Personal Mastery is the discipline that comprehends formulating a coherent picture of a personal vision and mission, creative tension, commitment to truth, and rapport. Personal mastery requires continually clarifying personal vision, focusing energies, developing patience, and seeing reality objectively (Senge et al., 1999). Learning to cultivate the tension between vision and reality can expand people’s capacity to make better choices, and to achieve more of the results that they have chosen (Senge, 1990).

Personal mastery includes self awareness, which refers to being conscious of one’s own set of values, beliefs, ideas, general emotional state, intellect and all the things that make up the total person, being aware of how these things interact with the individual as well as how they are stimulated form outside the person (Varney, 1996). Self-awareness encompass the perception of a person’s learning style. Learning style
involves how a person prefers to learn new and difficult material based on their psychological, sociological, physiological, emotional, and environmental preferences (Dunn & Dunn. 1993).

2.3.2 Mental Models

Mental Models is the discipline of reflection and inquiry skills. Its main focus is developing awareness of the attitudes and perceptions that influence thought and interactions. A mental model is a person’s schema. It consists of the set of rules that reflect personal experience. A schema also contains the rules indicating how the person should respond to new experience, which may include extending, modifying, or changing the rules comprising the schema. By continually reflecting upon, talking about, and reconsidering a person’s internal pictures of the world, people can gain more capability in governing their actions and decisions (Senge et al., 1999).

2.3.3 Shared Vision

Shared Vision is a discipline that establishes a focus on mutual purpose. People learn to nourish a sense of commitment in a group or organization by developing shared images of the future they seek to create and, the principles and guiding practices by which they hope to get there. People sharing a similar picture of the future, one involving what deeply matters to them, and being committed to one another’s having it. The tools necessary for building and working with shared vision originate from personal mastery. As people continuously share their personal visions over time, shared visions grow as the by-product of their interactions (Senge, 1990).
2.3.4 Team Learning

Team learning is a discipline of group interaction. Teams transform their collective thinking, learning to mobilize their energies and actions to achieve common goals, drawing forth an intelligence and ability greater than the sum of the individual member's talents. Group interaction is accomplished through the use of a variety of techniques. Dialogue and discussion are two complementary techniques that are used in team learning. Although dialogue is seen as convergent and discussion as divergent, both can lead to new courses of action. It is important, though, that dialogue be grounded in reflection and inquiry skills (Senge, 1990).

2.3.5 Systems Thinking

Systems thinking is a discipline for seeing wholes. In this discipline, people learn to better understand interdependency and change. The essence of the discipline is metanoia. It involves shifting our perspective from looking for linear cause-effect chains to seeing patterns of interrelationships and, from seeing snapshots of events to seeing movies of processes of change (Senge, 1990). This shift of mind produces evolutionary thinking-thinking in terms of change, growth, and development (Senge, 1990; Capra, 1996). The systems perspective is becoming increasingly important in understanding real world complexities (Capra, 1996).

For the systems thinker, relationships are primary. In systems thinking reality is perceived as a network of relationships (Capra, 1996). A shift of mind allows us to discover how we, in fact, create our reality. We shift from viewing ourselves as separate from the world to seeing ourselves as connected to the world. In the new
systems thinking, the metaphor of knowledge as a building is being replaced by the metaphor of knowledge as a network.

As we perceive reality as a network of relationships, our description of reality form an interconnected network of concepts and models in which there are no foundations, is knowledge in which no part is any more fundamental than the others (Capra. 1996).

In systems thinking, the essential or systemic properties are properties of the whole, which none of the parts have. These properties arise from the organizing relations of the parts, that is, from a configuration of ordered relationships that is characteristic of that particular system. When a system is dissected into isolated elements, systemic properties are destroyed (Capra. 1996).

Another key concept of systems thinking is the ability to shift one's attention back and forth between systems levels. In general, different system levels represent levels of differing complexity. At each level the observed phenomena exhibit particular properties that do not exist at other levels. In a system, the properties of a particular level are called "emergent properties", since they emerge at that particular level. Therefore, the properties of the parts are not intrinsic properties and they can be only understood within the context of the larger whole. In this sense, systems thinking is contextual thinking. Thinking in which things are explained in terms of their context. In systems thinking, a part is merely a pattern in an inseparable web of relationships. The shift from the parts to the whole can be seen as a shift from objects to relationships (Capra. 1996).

Another aspect in systems thinking is process thinking. According to Capra (1996), "Systems thinking is always process thinking" (p.42). This notion comes from the development of systems thinking during the twentieth century. In systems science
every structure is seen as the manifestation of underlying processes. The process aspect was emphasized by: cyberneticists that made feedback loops and other dynamic patterns a central subject of investigation; ecologists that studied the cyclical flows of matter and energy through ecosystems and depicted ecosystems in terms of simple flow diagrams; biologists with the concept of homeostasis, the self regulatory mechanism that allows organisms to maintain themselves in a state of dynamic balance with their variables fluctuating between tolerance limits; and the combination of order and activity in cell metabolism as a continual, complex, and highly organized activity (Capra. 1996).

The nineteenth century biologists observed that the living universe evolved from disorder to order, toward states of ever increasing complexity. But, according to the second law of thermodynamics, the entropy of a closed physical system will keep increasing. this evolution is accompanied by increasing disorder, therefore entropy can also be seen as a measure of disorder. A twentieth century biologist, Ludwig von Bertalanffy (1940), took a first step to solve this dilemma by considering that living organisms are “open systems” that cannot be described by classical thermodynamics. He considered these systems open because they need to feed on a continual flux of matter and energy from their environment to stay alive. Unlike close systems, open systems maintain themselves far from equilibrium in a steady state characterized by continual flow and change, and exhibit self-regulation (Capra. 1996). The formulation of the new thermodynamics of open systems occurred in the seventies, solving the dilemma of the two contradictory nineteenth-century views of evolution (Capra. 1996: Coveney & Highfield. 1995).
Systems thinking and its practice is based in an understanding of the concept of feedback as a reciprocal flow of influence. Feedback refers to the process in which information about the outcomes of an action is fed back into the decision-making, or regulation, process to affect the next action (Stacey. 1996; Capra. 1996; Senge. 1990). In a broader sense, feedback is the conveying of information about the outcome of any process or activity to its source (Capra. 1996).

Frijof Capra (1996) defines feedback as:

A feedback loop is a circular arrangement of casually connected elements, in which an initial cause propagates around the links of the loop, so that each element has an effect on the next, until the last feeds back the effect into the first element of the cycle. The consequence of this arrangement is that the first link ("input") is affected by the last ("output"), which results in self-regulation of the entire system, as the initial effect is modified each time it travels around the cycle (p.56).

For systems thinking the importance of feedback loops is the recognition that they depict patterns of organization. “Feedback loops are abstract patterns of relationships embedded in physical structures or in the activities of living organism (Capra. 1996. p.64).” For the first time in system thinking, the pattern of organization of a system is clearly distinguished from its physical structure (Capra. 1996).

### 2.3.6 Facilitation

Senge (1990), presents the need for learning organization members to become learning facilitators. Attending to facilitation in the team dialogue and helping people learn to effectively facilitate is one of the goals of the learning organization. The main belief behind group facilitation is that full cooperation between all people is possible and desirable. This process values equality, shared decision making, power sharing and personal responsibility (Hunter. Bailey. & Taylor. 1995a).
Facilitation is an organizational development intervention technique, that involves the use of a knowledgeable, sensitive and skilled person to help diagnose, understand and resolve the problems (Pishkurich, 1996). To intervene means to enter an ongoing system (Schwarz, 1994). Facilitation is a process rather than a content. A facilitator is a process guide someone who makes a process easier. Facilitation is about moving and the facilitator guides the group towards the agreed destination (Hunter et al., 1995a). This destination will improve the way in which the group identifies and solves problems, and makes decisions. The facilitator's main task is to help the group increase its effectiveness by improving its process. (Schwarz, 1994). To create a learning organization, leaders must become facilitators as well as coaches.

2.3.7 Self-directed Learning

Self-directed learning is a critical skill for the creation of a successful learning organization. Self-directed learning refers to all cases where the responsibility for and control of the learning experience such as planning, delivery and assessment, is largely transferred from the institution to the individual learner (Tight, 1996). In self-directed learning, the students choose the content they want to learn and through which means they will accomplish their learning goals (Pishkurich, 1996). Therefore, in a learning organization it is important to understand and enhance self-directness of organizational members. Self-directed learning requires from the organizational members the development of lifelong learning skills such as reading, listening, observation and reflection, to sustain the learning organization.
2.3.8 Culture

When a learning organization is created an organizational culture is developed. An organizational culture is a pattern of basic assumptions—invended, discovered, or developed by a given group as it learns to cope with its problems of external adaptation and internal integration, that has worked well enough to be taught to new members as the correct way to perceive, think, and feel in relation to those problems (Schein, 1992).

According to Schein (1992), culture is a learned product of group experience and is to be found only where there is a definable group with a significant history. Culture is a deep level of basic assumptions and beliefs that are shared by members of an organization. These assumptions and beliefs operate at an unconscious level and define the basic "taken-for-granted" view the organization has of itself and its environment.

Schein (1989) categorized organizational culture into three co-mingling levels. The higher the level, the more complex and more unconscious. The first level of culture are artifacts and creations of the constructed physical and social environment. This level is the most visible level of culture, and includes: 1) technologies. 2) works of art and. 3) visible and audible behavioral patterns. Artifacts are any and all artifices that can be studied by the senses: sight, sound, touch, smell and taste. The second level of culture are values. Values reflect someone's sense of what ought to be as distinct from what is. Values are testable in the physical environment by social consensus. The third level of culture is basic assumptions. Basic assumptions are implicit assumptions that guide behavior with little variation within a cultural unit and are usually taken for granted. Basic assumptions include: 1) the theories-in-use, which are the implicit assumptions that actually guide behavior and tell members of
a group how to perceive, think, and feel about things; 2) the nature of human nature, activity, and relationships; 3) a group's accepted relationship to the environment, their concept of nature, reality, time, and space. For a group their basic assumptions tend to be non-confrontable and non-debatable (Schein. 1992: Ott. 1989). Basic assumptions are the essence of culture: values and behavior are manifestations of that essence.

2.3.9 Community

Underlying the cultural perspective is the concept of community and the importance of shared meanings and shared values (Sergiovanni. 1992b). For Sergiovanni (1996), culture and community are not the same. All educational institutions may have cultures, but not all institutions are communities. The idea of an educational institution as a learning community suggests a kind of relationship, a connectedness among members that resembles what is found in a closely knit group such as a family or a neighborhood. Communities are defined by their centers-repositories of values, sentiment, and beliefs that provided the needed cement for bonding people together in a common cause (Sergiovanni. 1992b). Communities of learners are committed to discover and provide conditions that elicit and support human learning.(Barth. 1990).

Wheatley (1999) states that:

...a living network will transmit only what it decides is meaningful.... To use a network's communication capacity. We must notice that its transmission power is directly linked to the meaningfulness of the information. (p. 151)

Palmer (1998). presents the three prevalent models of community used in education. These models are the: 1) therapeutic. 2) civic, and 3) marketing model. The therapeutic model of community, is the model most often implied when the word
community is used. This model makes intimacy the highest value in human relationships. In the therapeutic model the norm is a narrow band of intimate encounters, and relationships are judged by the norm of intimacy. The civic model of community is a model based on public mutuality. In this model the norm is the wide range of relations among members. In the community people learn to share a common territory and resources, and to resolve mutual conflicts and problems by democratic means. The marketing model of community combines the personalism of the therapeutic model with the pragmatism of the civic model. In this model the norms are to improve the educational institution's product by strengthening relations with stakeholders and becoming more accountable to them.

Palmer (1998), introduced a fourth model of community as an alternative to the traditional models. "the community of truth." This model of community claims that reality is a web of communal relationships and that reality can only be known by being in community with it. According to Palmer (1998):

Truth is an eternal conversation about things that matter. conducted with passion and discipline. I understand truth is the passionate and disciplined process of inquiry and dialogue itself. as the dynamic conversation of a community that keeps testing old conclusions and coming to new ones. (p. 104)

In this model "truth" is seen as an eternal conversation whose conclusions and norms keep changing. In the community members become aware of their assumptions and theories. Members of the community of truth know how to observe, reflect, speak and listen, with passion and discipline, around a given subject. To teach in the community of truth is to create a space in which the community of truth is practiced, since a good education is always more process than product (Palmer. 1998).
According to Palmer (1998), community does not emerge spontaneously from some relational reflex, especially in the complex and often conflicted educational institutions where most educators work. In order to have communities of discourse about teaching and learning, communities that are intentional about the topics to be pursued and the ground rules to be practiced, leaders are needed who can call people towards that vision. Fullan and Hargreaves (1991), offer twelve guidelines that can be adapted to help build learning communities.

1. Locate, listen to and articulate your inner voice.

2. Practice reflection in action, on action and about action.

3. Develop a risk-taking mentality.

4. Trust processes as well as people.

5. Appreciate the total person in working with others.

6. Commit to working with colleagues.

7. Redefine your role to extend beyond the classroom.

8. Balance work and life.

9. Push and support principals and other administrators to develop interactive professionalism.

10. Commit to continuous improvement and perpetual learning.

11. Monitor and strengthen the connection between your development and student's development (p. 64)
2.3.10 Learning Organizations in Higher Education

For the past ten years researches have applied and documented the concepts of Senge’s learning organization theory in different types of organizations. In academia several models of curriculum change that aim at creating a learning organization have been developed.

Chen (1993). studied the pedagogical practice of the Public Policy and Management strategic leadership course, taught by Dr. Backoff, from a dialectical, deliberative perspective. The study was an exploration of “dialogical practice” in a professional education site. Chen (1993). examined and compared the epistemology of practice and the pedagogical assumptions on which the curriculum was based. Her study focused on the development of relationships between teacher and students in pursuit of knowledge/reflection-in-action. The study focused on: 1) what and how knowledge is constructed and disseminated, 2) how social relations are structured, and 3) how students and teachers come to see their roles in curricular events.

The study addressed findings regarding: (1) how to encourage an inquiry community in which teachers and students have equal access to defining what should be known in classroom social and cognitive text events; (2) which evaluative/reflective approach provides students with better feedback and fosters student creativity and competence in the pursuit of knowledge-in-action; and (3) what linguistic understanding of peer talk help capture the classroom ecology for the improvement of teaching and learning (Chen, 1993).

Young (1996). documented the first co-creating learning organization policy laboratory at the School of Public Policy and Management. In her study. Young (1996). described the impact of a learning organization on individual learning. The focus of
her study was the design, delivery, and receipt of an experiential, graduate-level leadership course emphasizing the development of self as leader and structured around principles of neurolinguistic programming.

Her study explored the questions: 1) How did participants perceive changes in their own growth and development?, and 2) What were the experiences and emergent outcomes of being engaged in a curriculum and learning environment designed to facilitate personal change?

The research had an emphasis in leadership literature on self-leadership, personal mastery, and the character and thought processes of the effective leader. The objective was to begin to address the marked absence of academic research into the how of effective leadership and to research the use of NLP principles and processes in the area of leadership development. The study drew upon four literatures: those on learning organizations, individual change and development, leadership, and neurolinguistic programming. Issues addressed included the notions of perception, dialogue, disclosure, identity, empowerment and personal change.

Among the findings of Young's study were:

1. students made progress on achieving desired outcomes and reported growth which had lasting effects:

2. students attributed changes they experienced to various of the course concepts, interactions, exercises, and/or assignments.

3. the learning environment desired for fostering deep personal change closely resembled an optimal therapeutic setting, with both the risks and benefits that implies (Young, 1994).
Peckover and Towers (1999), documented the development of a learning organization model in the M.Ed. program at Saint Mary's University in Minnesota. The Learning Community Model is a program based on the learning community model. The model was operationalized in a professional teacher development program. The program incorporated the principles of adult learning and constructivism. Systems thinking was linked to the ongoing program evaluation process as a means of promoting continuous learning within the organization.

During the program experience participants created a learning community by:

- developing vision for purposeful learning.
- developing and taking mutual responsibility for creating and carrying out learning plans and action research.
- developing resources and support networks.
- self-evaluating personal and corporate learning community growth and progress.
- constructing and sharing a knowledge base for their entire learning community.
- construct a living history of the learning community, celebrating the identity of the community.

In practice, the community established the learning standards and provided small support teams of community members as teachers developed areas of inquiry and engaged in action research and program development in their classrooms, schools, and communities. The program was designed to create a caring community through the intentional valuing, care for and celebration of the personhood of each member as part the community (Peckover & Towers, 1999).
2.3.11 Summary

A learning organization is a never-ending process of learning and personal mastery. In learning organizations individuals have a shared vision of where they are going. Members of learning organizations create a space where learning can occur without the burden of constant evaluation and criticism (Senge, 1990; Kofman & Senge, 1995; Fullan, 1993; Kline & Saunders, 1993; Young, 1994). Learning organizations never achieve a state of permanent excellence since a learning organization is always in the state of practicing the disciplines of learning.

In learning organizations members become learning facilitators. The main belief behind facilitation is that full cooperation between all people is possible and desirable. This process values equality, shared decision making, power sharing and personal responsibility (Hunter et al., 1995a). Self-directed learning is another critical skill for the creation of a successful learning organization. Self-directness combined with facilitation are the basic ingredients of the learning organization's culture.

All learning organizations have their own unique culture. Culture is defined as a deep level of basic assumptions and beliefs that are shared by the members of an organization. Underlying the cultural perspective is the concept of community and the importance of shared meanings and shared values (Sergiovanni, 1992b).

Communities of learners are committed to discovering and providing conditions that elicit and support human learning (Barth, 1990). In academia several models of curriculum change that aim at creating a learning organization have been developed.
CHAPTER 3

RESEARCH METHODOLOGY

This chapter is comprised of four parts. First, the research design is presented including procedures, the research paradigm, and perspectives of the researcher. Second, an overview of the course is provided. Third, the research process is detailed, and finally, delimitations and problematic aspects of the research are presented.

3.1 Research Design

This study employed a multiple-case, embedded case study design with multiple levels and units of analysis. Such qualitative methodology was determined to be most responsive to the research questions and to the context and focus of this descriptive study. The research included the design and implementation of the co-created learning organization. In light of the absence of academic research on certain components, this study qualifies as a revelatory case (Yin, 1989). Secondarily, it addressed discipline teams progress, class experiences and teams exercises, which are all treated as subcases within the study.

Case studies aim toward analytic generalization rather than statistical generalizations. This means case studies are generalizable to theoretical propositions and
not to populations or universes. This method uses previously developed theory as a template with which to compare the results of the case study (Yin. 1989).

Case studies strength is its ability to deal with a full variety of evidence. This study was a case study research to describe the real life context in which this curriculum change occurred. For data collection this case used multiple sources of evidence such as archival records, interviews, direct observation, participant observation, and physical artifacts (Yin. 1989: Lincoln & Guba. 1985: Patton. 1990).

3.1.1 Paradigm

Currently we are experiencing an era with multiple paradigms. Thus, there are many ways to do scientific research. "A paradigm is a worldview, a general perspective, a way of breaking down the complexity of the real world" (Patton. 1990. p.37). There has been a change in the beliefs, values and techniques that guide scientific inquiry since Kuhn presented the notion of paradigm shift. We can define paradigm as all the beliefs, values, techniques and so on shared by members of a given community (Kuhn. 1970).

Positivist paradigms or Newtonian paradigm hold that reality is single, tangible, and fragmentable, which can be observed, measured and controlled by objective scientists. This approach assumes that the researcher can manipulate the variables of interests. They seek explanations and predictions that will be generalizable to similar populations (Patton. 1990: Lincoln & Guba, 1985). In this linear paradigm, the researcher seeks a precise, rational and effective solution to problems (VanderVen. 1999).
The complexity as the naturalistic paradigm assumes that there are multiple realities. These realities are based on the personal interactions that shape one another and shape their perceptions. The naturalistic paradigm in the social sciences is characterized by: the researcher as human instrument, qualitative methods, inductive data analysis, emergent design, and the utilization of tacit (intuitive or felt) knowledge and idiographic interpretation (Lincoln & Guba. 1985).

3.2 Research Procedures

3.2.1 Site and Subject Selection

There are no rules for sample size in conducting qualitative studies. Glesne and Peshkin (1992) point out that in doing qualitative inquiry depth is traded for breadth in terms of the numbers game. Sample size depends on what the researcher wants to know, the purpose of the inquiry, what will be useful, and what can be done with available time and resources. Qualitative research typically focuses in depth on relatively small samples, selected purposefully (Patton. 1990).

The study was conducted with the members (including facilitators) of CCLO I and II. Students taking the class varied in age from the mid-twenties to the late forties, spanned a range from full-time to part-time to single-course enrollment, were enrolled in master's and doctoral programs or continuing education, and represented an array of areas of employment, typically within health fields, public agencies and education.

The members of CCLO I consisted of five MPA students, six MA students six in PPM and one in education, and six PhD students five in education one in engineering. The members of CCLO II consisted of three MPA students, seven MA students six in PPM one in education, five PhD students five in education and one in PPM. New
participants included one PhD and five MA students all from PPM. Everyone in class was fluent in English, although English was not everyones' native language.

3.2.2 The Coaching Team

The coaching team was always part of the co-created learning organization. It consisted of four people, including the researcher. The coaching team for the class consisted of the professor of record, charged with primary responsibility for the course: a Ph.D. in education who had coached and facilitated every co-created class with the instructor of record and was an integral member of the original design team five years ago; a MA student in PPM who had taken the course and had coached with the team for three years; and a Ph.D. candidate studying in the areas of instructional design, leadership, public policy and management, and higher education who had taken the course and had coached for two years. The coaching team also shared a strong belief in the value of self-knowledge, self-discovery, the workings of the unconscious, and experiential education. In addition, they shared the belief that effective leadership is fostered by constructing leaders who view leadership within.

The instructor of record was a full professor and author of his school’s first leadership course, which had been offered for more than a decade and which now served as a prerequisite for this course. The instructor of record was already known for his high expectations of and belief in students and his personable style (Young, 1994).

3.2.3 Access

Gaining access refers to the acquisition of consent to go, observe, talk, and obtain documents required to do the research (Glesne & Peshkin, 1992). Access for the research was secured through conversations with the coaching team and students.
enrolling in the course. At the end of the first class session, students were informed that the course would be the subject of research conducted by one of the members of the coaching team. In fact, some of the students were already aware of that fact. A formal request was made of the students to permit their data to be used, and all gave their permission. In addition, the researcher had been one of the course's coaches and a matriculated student in the class twice—once during the pilot course six years prior to this study and again two years before the current research project.

3.2.4 Pilot Study

The notion of preliminary inquiry, as Glesne and Peshkin (1992), point out, is not to get data per se, but to learn about the research process, interview schedule, observation techniques and oneself as the researcher. The researcher did a preliminary research study in the Fall quarter 1997. The preliminary study consisted of observing, recording, and facilitating the Strategic Leadership class, which is a required course and pre-requisite for the CCLO class. During this period the researcher became part of the PPM community. With the results of that study, the research questions and research design were reviewed.

3.2.5 Data Collection

The data collection occurred over a two quarter period during Co-creating Learning Organizations I (CCLO I) and Co-creating Learning Organizations II (CCLO II). The two quarters spanned from January 1998 to June 1998. In designing the data collection, the researcher hoped to collect baseline information on class members through the use of:

1. Class observations
2. Informal interviews

3. Field notes

4. Class writings

5. Small group observations

6. Discipline team observations and records

7. Learning contract

8. Debriefings

9. Agendas

10. Social events

11. Outside class meetings

Data collection took place through a variety of means and was subject to several limitations. All classes were both video-taped and audio-taped. Most often, however, in-class small groups operated within the same large classroom space and as a result only segments of some group conversations were picked up by the video recorder while others were picked up by the audio recorder at the other end of the room. In a few cases, groups dispersed to other rooms or offices to conduct exercises, allowing for only one group's work to be documented on video-tape since there was only one video camera. In this case, the researcher would observe the other group and take an audio recording of their discussions. All the information reviewed and collected for the research study were the public statements and documents made in and for for the class.
Because the researcher is the primary instrument in qualitative research, all observations and analyses are viewed through the researcher’s worldview, biases, values and perspectives. Therefore, the researcher should be sensitive to the biases inherent in this kind of research in order to produce a worthwhile study (Merriam & Clark, 1991; Lincoln & Guba, 1985; Patton, 1990).

3.2.6 Observations

Observation is a major and critical method in all qualitative inquiry. Observation is used to see, hear and experience the classroom atmosphere and activities (Marshall & Rossman, 1995). Participant observation describes a wide range of research behavior across a continuum from mostly participation to mostly observation (Glesne & Peshkin, 1992).

In this study the researcher used the participant observation technique in a naturalistic setting, that is, the data collection took place wherever the class met. The researcher carried a notebook and tape recorder at all times. Field notes were maintained throughout the study, and the researcher engaged in reflective writings on issues related to methodology.

3.2.7 Recordings

In addition to the researcher as the primary instrument, this study involved the extensive use of videotaping and audiotaping. Both a video camera and an audio recorder were used to record every moment of the class. The use of video played a multiple role in this study. It served as a holistic interview-recorder, a silent observer, and a video-based note taker. The video camera was placed in a corner of the room.
on a tripod. The audiotape was used as a back-up for the video tape, to collect data from groups not videotaped, and to obtain verbatim transcriptions.

The use of the recording tools not only helped record the entire process but also freed the researcher from attachment to the camera in order to observe participants attentively and take field notes during the process.

3.2.8 Documents

Documents provide historical artifacts that can showcase the participants' works. All documents produced for the community and by the community were collected. Every class session started with the distribution of the day's agenda and a packet of handouts created by the coaches and the discipline teams.

3.2.9 Informal interviews

An interview is "a conversation with a purpose" (Patton, 1990). It is used to find out what is in and on participants' minds for the purpose of uncovering their meaning from various perspectives. Interviews were purposefully conversational in nature, and the researcher used these opportunities to establish rapport and increasingly build trust with the person being interviewed. Research talk differs from other general talk in that it is driven by a research purpose (Glesne & Peshkin, 1992).

3.3 The Co-created Course Sequence

The course itself was comprised of ten evening sessions for the first quarter (CCLO I), each three hours in length, and required a student commitment of approximately ten hours outside of class to conduct team projects. The nature of these projects was
developed as the course unfolded. The second quarter (CCLO II) consisted of nine Saturday morning sessions.

Four textbooks were selected as the required readings for the course: 1) *The Fifth Discipline Fieldbook* (1994) by Peter Senge et. al.. 2) *Personality Types* (1996) by Don Riso and Russ Hudson. 3) *The Enneagram in Love and Work* (1996) by Helen Palmer. and 4) *Mindworks* (1997) by Anne Linden. Additional supplementary readings were anticipated but not actually distributed. Although readings were assigned by the coaches or the groups, almost no time was spent in class discussing the readings.

Assignments were made on a week-by-week basis by the different design teams. A session agenda was posted each week with an initial list of assignments, open to modification at the end of that class session. Details of the events of each class session for CCLO I are provided in Chapter 4 and details of the events of CCLO II are provided in Chapter 5.

Students were expected to keep a leadership journal in which they would apply their learning organization insights, concepts and skills to other aspects of their lives and to engage in further reflection on their own experiences within the class as well as their application experiments in the world. They also had to document the impact of their actions and how they might modify them in future efforts. Guidelines were supplied for journal entries which asked specifically about student’s attempts at application. Community members had to develop a learning contracts that were distributed and shared with all the members of the CCLO community and they had to participate in a discipline design team. The learning contracts were in part used by the discipline teams to help create activities that would help individual members achieve their goals.
3.4 Data Analysis, Synthesis and Interpretation

The primary strategy of data analysis and synthesis used was relying on theoretical propositions from the fields of educational and organizational change, which was deemed most appropriate strategy for naturalistic data processing and, in particular, for a descriptive study (Lincoln & Guba, 1985: Marshall & Rossman, 1995: Patton, 1990: Yin, 1989). The mode of analysis is explanation building which explains the causal links in the described context. Consequently, patterns, themes and categories of analysis came from theory and the data. Analysis and synthesis are complementary neither replaces the other. Systems thinking incorporates both.

According to Gharajedaghi and Ackoff (cited in Patton, 1990) systems approach to research requires synthetic thinking. Synthetic thinking is required to explain system behavior. It differs significantly from analysis. The main steps of analysis are: 1) The thing to be explained is taken apart. 2) The contained parts are explained. 3) Knowledge of the parts is aggregated into knowledge of the whole. The main steps of synthetic thinking are: 1) The thing to be studied is taken to be part of a larger whole. 2) The containing whole is explained. 3) Understanding of the containing whole is disaggregated to explain the parts.

The data reduction and analysis included: 1) write-ups of field notes and descriptions. 2) summaries of condensed notes as events and behaviors, units of information such as themes, behaviors, ideas and concerns, and 3) theoretical notes, which include working hypotheses, concepts and hunches. Evidence of these are summarized transcripts, category cards with referent index: list of units of information: tally sheets: computer analyses (Lincoln & Guba, 1985). Class video tapes were examined for observable theoretical constructs. All course videotapes were viewed one or two times.
and selected segments were transcribed. The initial viewing and transcription focused on what was said and done.

The data on the video tape were reviewed as many times as necessary. The process involved data reduction. In addition, an appropriate computer program was used to organize the data on the tapes and observation notes. The analysis was guided by the research questions stated previously. The analysis evolved around the data reduction, organization, matching and generation of categories as a result of the study of all data sources. Data on audio and video tapes were the primary data source of this study. Observation notes and training documents were used to provide an extensive understanding of the study and training context. The categorized data eventually assisted me in data interpretation and drawing conclusions.

To begin, the documentation of each tape was reviewed, one at a time. Notes were made and data coded by class session and topic, where the codings sometimes referred to the context/subject and/or sometimes to the nature of the response. What was sought in particular were reports of new learnings, new insights and desired change within a cluster of responses to course-related events. When the initial sorting, re-sorting and clustering was completed, attention moved once again to the video-tapes. Transcripts were reviewed and tapes were watched for evidence of new methods, materials and/or beliefs. Patterns were sought along with indicators of a strong commonality or diversity of experience.

The data reduction and synthesis phase of the study was comprised of the: 1) categorical structures- which includes themes, definitions, relationships, 2) findings and conclusions which included interpretations and inferences, and 3) final report
which includes the connection to existing literature, integration of concepts, relationships and interpretation. The evidence of these are presented in hierarchies of concepts and categories, explanations of concepts, and completed documents (Lincoln & Guba, 1985). This focus provided the opportunity to gain a broader perspective on the course experience and to better address the type of pedagogy employed. The research makes a contribution to the area of curriculum and course design for leadership development programs.

3.4.1 Trustworthiness

Inherent in the design of the research is the triangulation of data collection methods and sources: findings were triangulated by combining participant documentation with researcher and co-coaches observations and the work of a peer reviewer/debriefer. During the term of the course, questions were posed to participants to confirm or disconfirm commonalities in experience. For this study, several alternative criteria provided by Lincoln and Guba (1985) to establish trustworthiness were used. They include prolonged engagement, persistent observations, triangulation, thick description, peer debriefing, and member checks.

Trustworthiness was established by using various data sources and comparing them for patterns. The video taped observations provided opportunities to review and revisit themes or experiences and illuminated patterns. Document collection and informal interviews provided alternative sources of data that added depth and increased opportunities to verify patterns. Data from all these methods was analyzed and compared using triangulation.
3.4.2 Prolonged Engagement

When doing qualitative studies, the researcher should invest sufficient time at the research settings to build trust, avoid preconception and misinformation, and detect distortions (Lincoln & Guba, 1985; Patton, 1990; Fetterman, 1998). I spent over two years interacting with PPM students and staff a long time before the dissertation topic was decided. I participated in PASTA’s (public administration student association) social events, and all the classes during the winter and spring quarter. By spending sufficient time with them, I got to establish trust and rapport with the participants. The design of the study was confirmed through the prolonged engagement, because I came to understand the schedule, ways of interacting, contextual situation, and local culture.

3.4.3 Persistent Observation

The techniques of persistent observations aim to identify the most salient factors and data in the situation that are related to the research questions and then focus on them in depth. To satisfy this criterion of trustworthiness, the researcher should be able to “describe in detail just how this process of tentative identification and detailed exploration was carried out” (p. 304) (Lincoln & Guba, 1985). A major focus of this study was how class members co-created a learning organization. The lengthy effort of persistent observations helped me identify salient characteristics and avoid misconceptions.

3.4.4 Peer Debriefing

Peer debriefing is a process which involves a discussion of data collection, analysis, tentative findings and conclusions with peers in order to explore assumptions.
biases, and interpretations as the study is in process. Throughout the study, peer
debriefing was used as a way to validate what the researcher observed and heard.
The peer debriefing group included students from the School of Public Policy and
Management and from the School of Teaching and Learning. Their constant discus­sions and feedback helped the researcher reflect and reevaluate tentative findings and
conclusions.

3.4.5 Triangulation

The technique of triangulation is employed to improve the probability that findings
and interpretations will be found credible. Triangulation involves four different modes:
multiple sources, methods, investigators, and theories. Basically the technique of
multiple sources is what the researchers mean when speaking of triangulation (Denzin,
1989: Lincoln & Guba. 1985). In this study, multiple sources and methods like
observations, video and audio recordings, interviews and related documents were used
to gather and confirm data. The data allowed the researcher to look at and verify
findings through different lenses. They provided the researcher sufficient materials
for a thick description in presenting and writing the findings.

3.4.6 Summary

Data collection in the site took six months from January 1998 to June 1998.
Observation of the participants and access was gained by coaching strategic leadership
during the fall quarter 1997. Informal interviews with the coaches began January
1997. Data was recorded by using video tape, audio tape, field notes, and documents.
Data was transcribed.
The data was coded using the computer program Atlas.ti. The Knowledge Workbench. The program was used to code the data and create relationship models. Conceptual and in-vivo codes were merged into supercodes that were then used to establish relationships between concepts and emergent themes in graphical networks. Networks were used to explore conceptual structures. All data was reviewed by peer debriefers.
CHAPTER 4

THE CO-CREATED COURSE: HOW IT ALL HAPPENED IN WINTER

There was a basic framework for the class in which students were free to co-create their learning experience. This framework consisted of the relative structure of the class. Each class began with an ice breaker. There was always a 10 minute break after 90 minutes of class and the closing activities were always signing up for the activities of the future sessions and a debrief of the current session.

Every class had an agenda with a number of modules and facilitation roles. Within the modules, which were educational units with objectives, instructions, information, activities or exercises, opportunities for journaling, worksheets, or homework. Each class began with the distribution of the day's agenda, co-created in the previous class. Each class session ended by debriefing and making the agenda for the next class. The teams or groups in each class correspond to the six discipline groups. Modules were the experiential activities, lecturettes, written exercises, and discussions created for the class by the discipline groups.

To create the agenda groups signed up for activities during the planning time. Each group also indicated how much time they would need per activity. Once an agenda had 180 minutes, which included a ten minute break and at least five minutes
for debriefing. That particular agenda was full and no one could sign up for any more activities. This meant that not every group could facilitate activities in every class.

The initial setup for the class was usually done by the professor of record and the coaches. They brought the static-cling sheets, markers, name tags, post-it pads, paper cups, napkins and any photocopies such as the agendas from the professors office. Sometimes they stored juice and other perishables in the department’s refrigerator and brought them to the next class session.

The food for the evening or morning, as the case may be was set up by the students who brought it. On Saturday mornings coffee was also prepared by the coaches or a class member on the department’s coffee pot.

The agenda, the previous class debrief and any other materials that had been scribed from the previous session were placed in front of each chair on the table by the coaches before class started.

4.1 Workshop/Playshop 1

The first class began when the professor of record gave the agenda, a class packet of handouts and introduced himself and the coaches. It was explained that the goal of the class was to stimulate a learning organization using the process of co-creating. Students would be expected to be involved in what Young (1996), categorized as three simultaneous journeys. These journeys were: 1) their personal journey, 2) the team journey and 3) the class journey. A primary component of the leadership class was to explore the inner world of the student as a leader. The co-creating process would help students become aware of their personal concepts of leadership, including their value and belief system, vision of self as a leader, personal mission, internal resources.
Table 4.1: Class 1 Organizational Plan

and the way in which they developed relationships and interactions within a learning community.

The workshop was seen as a place to try out new behaviors, roles, and skills, that could then be tried out and could always be changed or improved upon prior to actual performance. The goals of the course were described broadly as to encompass whatever direction the group as a whole might decide to explore, taking into consideration their individual and collective desired outcomes for the course.

The first point of the night was to introduce how the class was going to work. The initial framework for each night constitutes a number of modules which were categorized as: 1) icebreaker/warm-up. 2) activities 3-4 per night. 3) 10 minute debrief and 4) planning.

4.1.1 Module 1 Icebreaker—The Enneagram

The first module for the evening was to read a handout which contained a number of descriptions of the nine (9) enneagram personalities. The handout was based on the works of Palmer (1988), Linden and Spalding (1994) and Baron and Wagele (1994). It was explained that unlike other personality typologies that rely on standardized
questionnaires, the enneagram approach was one of self-discovery by reading about the different personality types.

For this first enneagram exercise, the class scanned through a short checklist of description, and then an extensive survey list. The students circled the phrases that appealed to them, while keeping in mind the answer to the question: Does the statement fits me? After the first selections were done, the students scanned back the different types selected and ranked them. After the initial 10 min. ranking the students moved around the room and talked to each other. The main question to discuss during the walkabout was: What was it that made you resonate to the description?

The second activity for the module was a lecturette to introduce and talk about the 20-30 books students could borrow from the professor's personal library. It was also indicated that enneagram modules could be facilitated under the mental models discipline. It was assumed that people would choose a book they considered right for themselves. The packet of enneagram material included the history of the enneagram, the guiding assumptions of the enneagram (a summary of Don Riso's work), an annotated bibliography, and some graphic representations of enneagram dynamics.

4.1.2 Module 2 The Course An Overview—Systems Thinking

The overview of the course began with a lecturette on a packet of transparencies on learning organizations by the professor of record. The lecturette focused on the underlying structure for the class. The main points of the lecturette included: 1) finding out who we were in leading and teaming, 2) the study of the emerging paradigm called learning organization, 3) different learning organization forms, 4) the principles
that comprise the deep structure of a learning organization. and 5) how this “learning community” or “community of practice” would work in a third sector or government structure.

As a learning organization, the class was interested in the process of learning, not just the product. It was discussed that it is in the process of becoming a learning organization where change occurs. It was a point of the class to share each person's knowledge and expertise with others in the class and their lives which included family, friends, and co-workers. The concept of practice was stressed by the words that “what's done here; leaves here.”

The lecturette ended with the reassurance that the structure was minimum in order to get the class started, and that the class could reexamine the concepts that form a learning organization. One of the central beliefs of the course was that the class would develop out of reflection and dialogue.

4.1.3 Module 3 The Five Disciplines: What Were Senge's Five Disciplines and Our Sixth Discipline

The third module began when one of the coaches did a 20 minute lecturette on Senge’s 5 disciplines. This lecturette included the particular approach the class would take when working with the disciplines. The coach defined a discipline as “an area for studying practice.” The coach added what the professor calls the 6th discipline—facilitation. Students could use the handouts to identify their areas of interest from the five disciplines together with the sixth discipline—facilitation/collaboration and community building.
The main question for the class was: How do we make these things happen? The main premise was that: If we practice the 6 disciplines we would make this a miniature learning organization.

4.1.4 Module 4 Co-Creating Our Learning Outcomes—What Members Of Learning Community Want To Learn?

The fourth module began with the introduction of a technique called affinity mapping. For this activity students choose in order of preference their 3 top areas of interest within the discipline, using the leadership competency wheel (see Appendix C). Basically, students were asked to select which competencies they wanted to learn, teach and develop within the disciplines. After the students had selected the things they wanted to work on they placed the post-it notes on the wall by discipline area.

4.1.5 Module 5 Co-Creating Learning Paths For Quarter—Phase 1, Weeks 2-5

The fifth module of the night was to create the discipline groups. Discipline groups were formed on the basis of the answers to the question: 1) What do you work on? 2) Who do I want to work with? 3) How much time will the group need for the first module. Everyone looked at their post-it with the disciplines ranking and went to their first choice.

After the discipline groups were formed, the members went to the wall and clustered and sorted the post-it notes from the learning wheel, and these were used by the groups as initial guides for the creation of exercises based on what their class members wanted to learn. There were 2 caveats: learning modules could not be done
individually and everyone should be involved in presenting modules during the first 3 weeks.

4.1.6 Module 6: Co-Creating Our Client Organizations: Who Will We Serve?

One of the requirements of the course was to apply what was being learned in the classroom to a "real world" organization. This could be done at the place where the students were working or with an outside client group. For this first class a representative from the Ohio Department of Mental Health came and talked about the work that had been done at the department and the different opportunities to facilitate and observe facilitation with this client organization. The professor of record also mentioned a number of projects that either him or the coaches were facilitating with government organizations. Some members of the class also mentioned some university groups that could use outside facilitators. A list of all the facilitation opportunities was created and individuals signed up for the outside facilitation.

4.1.7 Module 7 Debriefing—What Worked And What Would Have Been Better If . . .

The last item of the evenings agenda was the debrief. During this exercise the class went through a round robin discussion of what everyone liked and disliked in the evening's session. The key ideas of the debrief were recorded and distributed during the next class.
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<td>Icebreaker</td>
<td>Tell Me Something Nobody Knows</td>
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<td>2</td>
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<td>4</td>
<td>60</td>
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<td>I Believe ...</td>
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Table 4.2: Class 2 Organizational Plan

4.2 Workshop/Playshop 2

4.2.1 Module 1 Icebreaker—Tell Us Something Nobody Knows About You

The second class started with an icebreaker. The activity consisted of “telling the group something no one else knows about you”. The facilitator set the tone for the exercise by giving the example “my wife wants me to wear silky boxer shorts.” This exercise was also used as an introduction, so everyone reported their name, program, and something that no one in the class knew about them.

4.2.2 Module 2 Facilitation—Defining The Term

The facilitation group presented the second activity of the session. They gave each person a sheet of paper to use in defining the term “facilitation”, asking the class members to use phrases and ideas in defining the term. After the individual reflection, the class members participated in a collective brainstorming session. The brainstorming session included ideas about facilitating self, others and groups. All the ideas were written on the static sheets and transcribed by the group for next week’s session.
After the brainstorming session another facilitator from the group led a five minute energizer to break up the monotony of the evening. Everyone stood up and made a circle. The members of the circle walked around the room, picked up the pace, spread feet, bent knees and popped like popcorn. The group finished their presentation by giving handouts from the book The Art of Facilitation.

4.2.3 Module 3 Mental Models—The Enneagram, A History

The professor of record, as a member of the mental models group, explained the enneagram and the concept of mental models from the enneagram point of view. The group then proceeded to relate the history of the enneagram and the different schools and provided the class members with several instruments that could be used in establishing each person’s enneagram number. After the activity was done there was a 10 minutes break.

4.2.4 Module 4 Personal Mastery—I Believe . . .

After the break the personal mastery group presented a risk taking exercise about beliefs. The exercise was designed by the group members based on the themes that emerged from the previous week personal mastery post-it notes which had the areas of: 1) discovery of self and 2) spirituality.

The exercise consisted of handing out a form in which the heading read “We would make a list of: I believe . . .” The instructions given to the class members were: to write down any strong held beliefs as many as possible in areas such as religion in general, morality, spirituality in general, science, welfare and astrology. After everyone had stated their beliefs an open forum discussion ensued in which some members requested explanations on certain items.
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</table>

Table 4.3: Class 3 Organizational Plan

The shared vision group did not make a presentation and the time left was used for the last two activities: the class planning of future sessions and the debriefing of the class.

4.3 Workshop/Playshop 3

The class began with the professor of record announcing a number of new and different outside facilitation opportunities. The next point for the evening was to explain the newly created role of “flowmaster.” The professor of record was the flow master for the evening, but from then on the community members would sign up for the role. The professor of record handed out the learning contracts he had received from the class members, so that every member of the community would be aware of what the other members of the community had contracted to work on. As the professor of record went down the agenda and asked the personal mastery group to begin with the icebreaker, the personal mastery group informed the group they were doing the first module but did not know that they had signed up for the icebreaker. So, the personal mastery group co-created an icebreaker on the fly.
4.3.1 Module 1 Icebreaker—Your Blood Pressure

The icebreaker consisted of asking for volunteers to take the groups blood pressure. Over four people in the group knew how to take the blood pressure using a sphygmomanometer.

4.3.2 Module 2 Personal Mastery—The Art of Breathing

The personal mastery group started their presentation by asking everyone in the classroom to measure their pulse and blood pressure. A facilitator from the group explained the meaning of the terms human pulse and blood pressure and the importance of the human pulse and blood pressure in general. Afterwards, the facilitator led everyone in taking their pulses at the same time. Pulse and blood pressure measurements were taken and each person wrote them in their notebook.

The next facilitator from the personal mastery group introduced the second exercise as the most fundamental thing human beings do, breathing. The facilitator explained that the breathing exercise that was done in the module come from Prana yoga and pertained to the art of breathing and the acquisition of energy. The facilitator explained that if human beings consciously work on their physical state, its emotional state could be changed.

In the exercise a hand chime was used to signal when to start and when to stop. The ceiling lights were turned off, but the overhead projector’s light remained on. The group practiced taking a full breath of air, and inhaling and exhaling it at an even pace. Keeping the breathing rhythm even was considered very important. After ten minutes, the group took their pulse again and the blood pressure. The initial
measurements were compared to the measurements after the breathing exercise. The class then engaged in a discussion about the effects of the breathing exercise.

4.3.3 Module 3 Mental Models—Enneagram at the Movies

A facilitator from the group of mental models continued the class. In his presentation, popular culture examples were used to discuss the enneagram. Handouts with movie and television actors such as Seinfeld were given out and discussed by the facilitator. The facilitator used the enneagram to establish the personality types of the characters in the movies and television programs according to their personal characteristics. Afterwards there was a 10 minute break.

4.3.4 Module 4 Team Learning—Listen

After the break a facilitator from the team learning discipline group divided the members of the class into three (3) groups of seven (7) people each. Everyone was blindfolded and instructions were given to start a conversation but not to talk directly to anyone, neither to call anyone by name. The blindfolded conversation lasted for fifteen minutes.

In the debrief of the exercise several questions emerged such as: How did the conversation among the team members evolved? How did the team members feel? Were the team members uncomfortable with the silence? Of the three groups one seemed involved in extremely deep conversation, and two groups looked disinterested and spread out. The other groups looked very intense, leaned forward and actively talked, sustaining conversations and listened to each other. In some of the conversations safe space issues came up as some group members talked about their expectations, trying
to feel a comfort zone in this new environment. Concerns were aired but after 15 minutes of debrief and conversation no closure was reached in any discussion.

4.3.5 Module 5 Systems Thinking—Defining Systems Thinking

A facilitator from the systems thinking group asked the class members if they had done their assigned readings from the syllabus. The group provided a definition of systems thinking according to Shafritz and Ott, gave handout, and a lecturette on the handout. To exemplify or demonstrate that in a system there was connectivity and that people were impacted by other people around them, the group conducted a kinesthetic exercise.

For the exercise, a new facilitator from the systems thinking group, asked the class members to stand up and form a circle around the classroom table and lock arms. Then asked everyone to go left, and then right: everyone to go in, and then out.

The module continued when the third facilitator from the systems thinking group asked each member of the class to choose an object and the system it works in. The facilitator provided the example of the brain working in the nervous system. The examples were scribed on static sheets for later transcription and distribution.

After these exercises the members did a recap of their presentation. They defined the term system. brought physical and metaphorical examples of a system. talked about systems at work and how they function or not.

The rest of the class period was used by the class members for planning the future classes and debriefing.
4.4 Workshop/Playshop 4

In this class session, the community had a class member acting as official flowmaster for the first time. Although from the beginning the community reached a compromise that we wanted to get out in time but we did not want to shortchange anyone. It became then the flowmaster’s role to request adjustments to the agenda if a group needed more time to finish an activity. Since all the members were not present, someone raised concern that we were starting the class without all the members present. A vote was taken and it was decided to update any late-comers later.

4.4.1 Module 1 Icebreaker—Your Luggage

The icebreaker began when the facilitator handed out sheets with a suitcase and underneath the suitcase the directions read: “Please fill the bag with five interesting facts about your life.” These were supposed to be five things that “were important for you and you don’t want to lose. your luggage. Things that were so you that you would die if they were gone.” After everyone wrote five things in their suitcases, the facilitator instructed the group to go and introduce yourself to another person and

Table 4.4: Class 4 Organizational Plan

<table>
<thead>
<tr>
<th>Module</th>
<th>Time</th>
<th>Discipline</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>10</td>
<td>Icebreaker</td>
<td>Personal Luggage</td>
</tr>
<tr>
<td>2</td>
<td>40</td>
<td>Personal Mastery</td>
<td>Personal Vision</td>
</tr>
<tr>
<td>3</td>
<td>15</td>
<td>Mental Models</td>
<td>Where Do We Go From Here?</td>
</tr>
<tr>
<td>4</td>
<td>35</td>
<td>Facilitation</td>
<td>Full Value Contract</td>
</tr>
<tr>
<td>5</td>
<td>60</td>
<td>Shared Vision</td>
<td>This Is My Community House</td>
</tr>
</tbody>
</table>

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exchange luggage. after 15 minutes every student would read whatever luggage s/he was holding for the rest of the class.

4.4.2 Module 2 Personal Mastery-Your Personal Vision

The personal mastery group led a second discussion about values as they gave the community feedback generated from the first discussion in the previous class. Their second activity for the evening was a metaphor for the concept creative tension. The facilitators gave each member of the class a rubber band and explained that as the hands pull away they create tension in the rubber band.

Then a third facilitator led a five minute breathing exercise “to center the self.” Immediately following the exercise, the class worked on the vision checklist from the *Fieldbook* identifying 10 values that were needed for each person. The class also worked on a handout called reality checklist, and began exploring their self image, tangible possessions, home, health, relationships, work, personal pursuits and community.

4.4.3 Module 3 Mental Models—Enneagram Dynamics

For the third module of the night, the mental models group used a worksheet to collect ideas and questions the class had so that they could develop a path to follow for the next classes. They asked the class to write which dilemmas and issues they had about enneagram type. The main question for reflection was how did the class want to move forward with the use of the enneagram. Then the dynamics of the enneagram were presented in a lecturette.
4.4.4 Module 4 Facilitation—Full Value Contract

The facilitation group led a discussion on the topic of facilitation as it relates to co-creating learning organizations. Their module contained 3 different activities the first was to listen to part of a tape about leadership while visualizing feeling and touching the experience.

Then a facilitator led a discussion in which they shared the values and assumptions leaders bring to the table with them as they introduced the concept of the full value contract. The full value contract was a tool used in group formation to lay out the ground rules and general group goal. The lecturette included handouts and presentation of the commitment that the class members had created during the second class. Then the facilitator led the discussion of the handouts.

The facilitator presented a number of transparencies containing examples from a leadership and community services class in Educational Policy and Leadership. as they introduced the next activity for the evening. The activity was to jot down 2 or 3 ideas they thought they wanted to work on together. Then the class had a round robin sharing session. which was scribed and given to the community in session five. The facilitators indicated that they would look for themes that come up and handed out a summary of the article A Facilitation Research Agenda by Bryson. Finn and Niederman. The handout contained 17 propositions and seven issues that facilitators face in their work. They also handed out a role identification guide. The guide contained information and description of the common roles in teamwork such as: scribe. timekeeper. gatekeeper. facilitator. note-taker. team leader. team member. reporter. observer. and the keeper of the vision.
4.4.5 Module 5 Shared Vision—This Was My Community House

Module five began after the break. The shared vision group began their module by asking for space on the table because the group was going to share some markers. For this activity everyone drew a picture of their house. The facilitator gave a hand out with the instructions on how to “build” or draw your house. The hand out specified what each part represented. The elements of the house were:

The foundation represents the concepts and values: the walls represent the things you do to strengthen and support, the concepts of your foundation; the windows represent the things you are proud of and want others to see; the door represents the important parts you have borrowed from someone else; the roof represented your protective mechanisms and the smoke stack the things you do to release stress.

A caveat was raised regarding the assumptions behind the smoke stack, since many of the international students come from countries where the architecture was different from American architecture and they do not have chimneys. The class listened to music while they worked for 20 minutes on our individual houses. After they all finished their individual houses, the group constructed a community house 8 static sheets/panels wide.

The last activities of the evening were the debrief and two students presented feedback from their field activity. They observed a two day workshop and reported how important the icebreaker was in leading the flow for the day.

4.5 Workshop/Playshop 5

The flow master announced that since class started late, they would have to make adjustments as they moved along to stay on time.
<table>
<thead>
<tr>
<th>Module</th>
<th>Time</th>
<th>Discipline</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>20</td>
<td>Icebreaker</td>
<td>Give Me A Hand</td>
</tr>
<tr>
<td>2</td>
<td>45</td>
<td>Personal Mastery</td>
<td>Meditation And Eulogy</td>
</tr>
<tr>
<td>3</td>
<td>20</td>
<td>Mental Models</td>
<td>Going To A Restaurant</td>
</tr>
<tr>
<td>4</td>
<td>40</td>
<td>Systems Thinking</td>
<td>Storytelling and The 5 Whys</td>
</tr>
<tr>
<td>5</td>
<td>40</td>
<td>Facilitation</td>
<td>Full Value Contract Part II</td>
</tr>
</tbody>
</table>

Table 4.5: Class 5 Organizational Plan

4.5.1 Module 1 Icebreaker—Give Me A Hand

For the first activity the facilitator asked the class to trace their left hand on a piece of paper. Then the class was instructed to write on each finger a thought using the following rules: 1) Pinkie something you do to have fun; 2) Ring- something to which you were committed to; 3) Middle- what you’ve done lately that you regret; 4) Index-what people want from you in a group; 5) Thumb- something positive.

Afterwards, each member of the class picked a finger and shared it with the group. The facilitator wanted to give participants a “hand” in getting to know one another.

4.5.2 Module 2 Personal Mastery—Meditation And The Eulogy

The second module began with an exercise to gather the group’s attention and create a mood to work on personal vision. The facilitator lit candles in the middle of the table and explained the 5 minute breathing exercise he was about to lead.

This exercise had a visual component, we practiced rhythmic breathing, worked on centering and concentrating on the flame. The facilitator turned the lights off, and the beginning and end of the exercise was marked by the sound of a hand chime.
The next activity was to continue work on the students personal vision. The students reviewed their personal vision checklist and worked on a goal exercise. This exercise was a personal activity that was not going to be shared with the class as a whole. Each person had to choose a goal from their vision checklist, and complete an exercise sheet which asked the question: Once you achieve your goal what will that bring you? Each answer was followed by the same question five times per goal. The facilitator indicated that this exercise was used to clarify the core values and beliefs behind each person’s goals.

The personal mastery group final exercise for the night was a discussion and answer to the question: what would you like people to say at your funeral? This exercised was shared and scribed.

4.5.3 Module 3 Mental Models—The Restaurant

The mental models first activity was to hand out a synopsis of feedback generated the previous week, and a copy of the exercise. For the exercise the facilitators divided into groups into like enneagram type. the rules were open. groups dispersed and after 10 minutes they came back with consensus of the discussion focused on what and how each group would go to a restaurant.

The flowmaster requested a shorter 6 minute break and used the chime to call the group to attention.

4.5.4 Module 4 Systems Thinking—Storytelling and The 5 Why’s

The module began with the facilitators handing out a packet of materials that contained “The Systems Thinker” newsletter, which was written by the group, and
a copy of the module with the instructions for the exercise that they were going to lead.

In the newsletter they synthesized the book Belonging to the Universe by Frijof Capra. The handout content dealt with the new paradigm in science, which Capra calls holistic, ecological or systemic. The exercise information included the techniques to facilitate systems thinking from the book, storytelling and the five why's. The next facilitator did a preview of the concept of archetypes, and announced that the next time they would work more on archetypes. The facilitator explained that the exercise was created to raise awareness of the systems that are in play in everyday life. The group used a common, well-known problem to uncover the hidden systems underneath the problem using two different methods storytelling and the five whys.

The facilitators divided the class into two groups and instructed that they would use two different methods and two different problems. For one group the subject was Saddam Hussein, and the other group used the topic of affirmative action.

The group using the storytelling method started with the statement “the problem was . . .” then after the issue was mapped and described then develop a theory about what caused the problem and listed the key factors critical to telling the story. The final step was to draw a picture of graph using time as the X axis and the key factors as the Y axis. The “five why’s” method was done by answering five different questions. The method was to pick a symptom of the problem and ask why was such and such taking place.

After recording all the answers ask why again and continue asking questions until you have delved five levels deep. Do this for 15 minutes and then we will debrief to see what you have uncovered about the method.
Then the groups came back and reported which method they liked best and what problems they had. Flowmaster thanked the personal mastery group for adjusting their presentation since the previous groups had gone overtime.

### 4.5.5 Module 5 Facilitation—Full Value Contract Part II

The facilitator began the module by continuing the previous week's conversation on facilitation and the full value contract. The presenter used a handout to talk about the role of facilitator and the different roles that need to be performed in meetings. This continued as a class discussion on what people do at meetings and what they should be doing to help the meetings move along and ideas of how to facilitate the different roles. The facilitator encouraged class members to rotate the roles discussed since doing so helps build community.

Class continued with a discussion of the full value contract. The facilitator reviewed the concepts and the process we used to identify the norms in the contract. Then discussed the brainstormed norm in a handout that needed clarification. Afterwards, the class discusses the full value contract norms which are found in Appendix D.

### 4.5.6 Module 6 Reporting On Outside Work

A member of the class reported on his outside facilitation. He attended a group strategic planning meeting and described what he observed the facilitators doing in the meeting. In the meeting, the facilitators did not answer questions but they fostered a questioning atmosphere. The student reported that he kept thinking that he could answer all the questions but the facilitators never did, and that he observed that all the participants left the meeting pleased with an agenda of what they were going to do the next time. The last activity was the evening's debrief.
4.6 Workshop/Playshop 6

4.6.1 Module 1 Icebreaker—The Straw Tower Of Pisa

The icebreaker was to construct a free-standing structure with 75 straws and masking tape. Every group had seven minutes planning time, eight minutes for building, two minutes for judging the structures and three minutes for debriefing. Each group consisted of 3 people. Out of four structures only two stood-up at the end of the building period and only one remained standing during the debrief of the activity.

4.6.2 Module 2 Team Learning—Mir, Wors, Dars, Luts and Mips

The second module for the evening was based on the categories that the class had said they needed to work on during the first session. The facilitator stressed that in those categories the class wanted to work on communication, listening and teamwork. The first activity the team learning group, the blindfolds exercise, was for listening. The one this evening was for communication.

The facilitator read the instructions for the module which were that mirs, wors and dars were ways of measuring time, and luts and mips were methods of measuring
The group had twenty minutes to figure out how many words does it take to get from point A to point D passing through points B and C. The rules were that people could only share the information orally, they had to keep the cards in their hands at all times and people could not switch cards. After 20 minutes the facilitators discussed the exercise. Both groups solve the problem within the allowed 20 minutes.

After the discussion, there was some extra time so the facilitators did an energizer. Everyone stood up and stretched.

4.6.3 Module 3 Facilitation—Needs Assessment Part 1

"Once upon a time you had a handout that looked like this," the facilitator for the module said. This session’s module was a continuation of the discussion on facilitation by looking at the seven issues in the facilitation article that was distributed the previous week. For the evening’s module the class would go through the first three issues and people would evaluate where they were right now in relationship to these topics and assess where they want to be.

4.6.4 Module 4 Mental Models—Enneagram and Work

The facilitator began with a homework assignment for enneagram watching/typing. The facilitator asked the participants to look at your friends and try to identify what number they are. During the week they were also to look at the people in your workplace. Take some time watch the person and observe the person that you chosen and write a journal entry. The next mental models activity within the same module was to read and discussed enneagram from the book the Enneagram of Love and Work. The last activity of the night was a discipline planning session and the class debrief.
<table>
<thead>
<tr>
<th>Module</th>
<th>Time</th>
<th>Discipline</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>45</td>
<td>Icebreaker</td>
<td>Exploring Our Names: Telling Our History</td>
</tr>
<tr>
<td>2</td>
<td>45</td>
<td>Personal Mastery</td>
<td>Spirit Journey: Lady Of Cholula</td>
</tr>
<tr>
<td>3</td>
<td>50</td>
<td>Facilitation</td>
<td>Needs Assessment Part II</td>
</tr>
<tr>
<td>4</td>
<td>10</td>
<td>Mental Models</td>
<td>A Year To Live</td>
</tr>
</tbody>
</table>

Table 4.7: Class 7 Organizational Plan

4.7 Workshop/Playshop 7

4.7.1 Module 1 Icebreaker—Exploring Our Names, Telling Our History

The facilitator began the module giving each person a piece of paper. She explained this was an activity she had seen at a workshop the previous week as a means of introducing people. The only instruction for the module was to “write about your name.” then everyone was going to share with the group what they wrote.

4.7.2 Module 2 Personal Mastery—Lady Of Cholula Meditation

The facilitator for the second module of the evening began with a review of the personal mastery group plan. He reminded everyone that the group had been working with spirituality. He continued with the statement that all the breathing exercises were for a specific reason.

They wanted to make the class aware that people’s attention was generally scattered and by using certain techniques like breathing they could gather their attention. The next step was to focus attention. That was what the class was going to do during this session. He mentioned learnt this meditation from a woman who was researching
statues gathered from around the world. The position the class was going to practice came from a piece of pre-Columbian art. He explained that in some circles it is believed that the statues positions have a meaning. In this particular case different positions lend themselves to different kinds of experiences. The facilitator stressed that he hoped people would be skeptical of the exercise because he wanted them to have a unique experience. The facilitator gave the class a handout that described the position and the exercise.

The facilitator went on to describe the position. People sat down with one hand on their right knee and the other on the lap. Then the facilitator turned on a recording of a rattle and turned off the lights. In this posture people can ask a question and expect an answer from the meditation process. The main instruction was to concentrate on the sound of the rattle and to experience whatever came to mind. The rattle was a catalyst, and the rattling sound would cause the sensation of the trance. After 15 minutes facilitator asked everyone to come back and they had a short debrief.

4.7.3 Module 3 Facilitation—Needs Assessment Part II

For module three, the facilitator recapped the work done the previous week. The facilitator stated that in the previous class the group talked about facilitation issues, facilitator characteristics, facilitator effectiveness and facilitation characteristics. Then the class continued the process of discussing the issues and evaluating themselves.

After they finished the auto-evaluation, the facilitator led a discussion of a CNN town meeting that had taken place at the university, and broadcasted all over the world. During the live broadcast several facilitation issues emerged so the facilitation
group took part of their time to discuss how the CNN facilitation could have been better.

4.7.4 Module 4 Mental Models—A Year To Live

The facilitator from the mental model’s group announced that their activity would be discussed during the next class meeting. He asked the class members to write a journal entry on the following scenario: You have a year to live, how were you going to spend that year?

The last activity of the evening was the class debriefing that included what things worked and the improvements that could be made for future classes.

4.8 Workshop/Playshop 8

4.8.1 Module 1 Icebreaker—Greetings

The evening’s icebreaker began with the facilitator asking the class members “How do you greet each other?” The group answers were followed by a discussion of the importance of greetings in different cultures.
4.8.2 Module 2 Team Learning—Talking And Listening

A facilitator from the team learning group began the second activity by distributing the groups handouts for their module. The facilitator stated their group objectives as trying to: 1) increase awareness of communication skills in a team setting and. 2) continue to learn how to interact effectively as a group member. In order to accomplish their goals the group members directed an experiential learning activity. The facilitator explained that a group of people would be talkers and another group would be listeners. The facilitator asked the class members to divide themselves into groups of four and decide who would be talking and who would be listening. Then, instructed the class members to switch whatever they though they were going to be.

The facilitator asked the talkers to raise their hands and instructed them to go to the hall and get a picture. The listeners received an amount of play dough and were told they would be the builders. The talkers would have three (3) minutes to describe in terms of geometric shapes the picture to the listeners who in turn would build the images being described out of playdough. Every group did two pictures, but a caveat was added for the second picture and it was that the “listeners” could not draw the picture before building with the clay. The module ended with a brief discussion of the activity.

4.8.3 Module 3 Personal Mastery—Time Management

The personal mastery group module was on time management. A group facilitator started the presentation by reviewing the principles from the book First Things First. by Covey. Their objective was to engage in personal mastery by mastering ourselves. A hand out with questions was given out. The class members answered the questions.
The questions were to list the things that if done on a regular basis would make a
tremendous impact in our personal and professional life. The answers were personal
and not shared with the class.

Afterwards a class discussion ensued about the difference between urgent and im­
portant. The class established that urgent required immediate action and pressed for
a reaction important to the results, things that could contribute to your mission and
goals. It was also said that effective people were not problem minded but opportunity
minded. The module concluded with a class discussion of Covey’s time management
quadrants.

4.8.4 Module 4 Mental Models—The Last Year Of Your Life

The facilitator from the mental models group asked the members of the class
to divide into groups according to their enneagram number. Then, he asked the
members of the different groups to meet with their group members and share what
they thought they would do during the last year of their lives. After 20 minutes
everyone returned and reported to the class. It took another 20 minutes to listen to
all the group’s reports.

4.8.5 Module 5 Shared Vision—Class And Community Vi­
sion

The facilitator of the shared vision group gave a 2 page handout and stated that
the group was going to work on creating a shared vision for the learning organization.
The handout contained a series of questions to help define a person’s vision for the
organization. However, main question for the evening was: What was your vision of
this class/this community? The second page of the handout included some definitions
of the terms mission, goal, vision, and purpose. The class members were asked to stay in their enneagram group and discuss the questions for 30 minutes. After the discussion time was over, each group reported their key points back to the class. When the module concluded the facilitator pointed out that the group would be working on the community vision for the next two classes.

The last activities of the evening were planning for future class meetings and the evening’s debrief.

4.9 Workshop/Playshop 9

The flow master was sick and someone volunteered to keep the class flow.

4.9.1 Module 1 Icebreaker—I Think You’re Special Because...

The facilitator asked the class members to take out a piece of paper and write at the top "I think ... is special because:" and pass it to the person to their right. The person receiving the paper would write on the blank the name of the person who gave them the paper and, write down briefly why they think that person was special. They kept passing the paper to their right, until everyone had written in it and it...
come back to the original person. The facilitator stated “I think sometimes people don’t know how special they were and this exercise was a reminder.”

4.9.2 Module 2 Systems Thinking—Looping

The facilitator from the systems group gave a lecturette about the concept of looping in systems thinking, emphasizing how loops affect everyone’s life. Then, he talked about reinforcing loops and balancing loops. Afterwards, the members of the class were asked to write about vicious or virtuous cycles in which they found themselves in, and to identify the underlying system. Some members of the class shared their examples with the community. The systems group continued their presentation by discussing balancing loops.

The next facilitator from the systems thinking group explained force field analysis as being about change and, as giving an overview of the organizational development. He explained the steps to map a force field and, read the steps and strategies to do a force field analysis. Then, he asked the members of the class to do a force field map of the issues they had identified in the previous exercise.

4.9.3 Module 3 Facilitation—Team Building

The module began with an energizer. The facilitator, a physical education major and international student, rearranged the class members for an energizer. She emphasized the importance of cultural sharing and explained that in some cultures people learned to dance before they learned to walk. For these people, American social gatherings, where people just ate and talked were strange. Then, she turned on the tape recorder which had music with a vibrant rhythm and a song entitled “follow
the leader." Everybody danced to the music and followed the facilitator for about 3 minutes.

The next facilitator from the community building group, told the class members that they wanted to bring together all the threads of facilitation and community building. She continued saying that their group wanted to do facilitation because the members of the group were enamored with the topic. Therefore, they were trying to make some meaning out of it and were trying to put it into action in some direction. All of them wanted to do a personal exploration in the area of facilitation.

They wanted to present the group with a theory they could put into practice, and create facilitation in a classroom environment that embodied the process and practice of community building. The group defined and gave the meaning of the term facilitation, looked at assumptions, discussed roles, and safe space. They asked for the insights of the class members about facilitation.

The facilitator expressed that they had not explicitly talked about what community was. But, according to the Fieldbook, community represents a change or exchange that is shared by all. He added that the six pieces of core processes fundamental to creating and sustaining organizations as communities were: 1) capability, 2) commitment, 3) contribution, 4) continuity, 5) collaboration and, 6) conscience. He continued by saying that there were a number of community models but, that in general community development had to engage the whole person, heart, mind, spirit and bodies.

Another facilitator from the same group stated "that everything he did in facilitation came back to the model of social change." He got to know the model from an article the professor of record gave to the class at the beginning of the quarter. He
added that, the work of each individual helps in defining the community, everyone plays a part in the symphony. Also, that leadership must be understood thorough the sense of responsibility that people have towards a community. Leadership was a process and we engage in it regardless of the position. Service was a powerful vehicle to develop leaders.

The community team building group cleared the table to do a group chore. The table was covered with a plastic cloth. They explained that the class was going to plant the community garden. The community team building group provided the materials for the activity. They included: a pot, soil, rocks, plant food and water. The members of the class helped re-plant a plant. The planting of the community garden represented the learning opportunities in relation to the seven C’s. The plant symbolized the class common pot. Each of the seven C’s was represented by:

1. Consciousness of self represented by the pot.

2. Congruence represented by the rocks.

3. Commitment represented by the soil that allows the plant to grow.

4. Collaboration represented by the plant.

5. Common purpose represented by the plant food.

6. Controversy represented by the water, needs to be applied as time goes on.

7. Citizenship represented by the sun and the social values that would continue to grow.

Every member of the class put something in during the planting, either some rocks, dirt the water or the plant. The plant was a coral berry. The class members
discussed how to keep the plant and gave ideas for a name. They decided to keep it at the PPM (public policy and management) lounge so that everyone had access to “spread their love.” After discussing different names, a facilitator suggested to name it “Coral Reef” since it reminded the facilitator of home. The name was also a metaphor since the plant would grow just like our community. To conclude the dialogue part of the activity a facilitator explained the meaning of each planting component and the actual planting of the garden began.

4.9.4 Module 4 Shared Vision—Create A Vision

The shared vision group facilitator continued last week’s discussion on shared vision, and brought a handout with the previous weeks comments on how to build a learning organization. The shared vision group also discussed the main components of a vision for a learning organization. In the next class the class members would map out their vision statement for the course.

4.9.5 Module 5 Mental Models—Release And Affirmation

A facilitator from the mental models group did a lecturette and recapped the enneagram numbers, development and growth. He then introduced a technique used to help enneagram development from an affirmation book. To use the technique the destructive behaviors must be released and a new behavior affirmed. The facilitator explained that some of the releases were more potent than others and so were some of the affirmations. He instructed the class members to choose a partner that was not of the same enneagram number. In each pair, one person made a statement and the other would verbalize it or said it in his/her head. Afterwards, they reversed roles and repeated the exercise. The focus of this exercise was the power of the spoken
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Table 4.10: Class 10 Organizational Plan

word. Both hearing and speaking the affirmations and releases had a powerful and emotional impact on the participants.

The last activities of the evening were planning the next meeting, and a debriefing.

**4.10 Workshop/Playshop 10**

**4.10.1 Module 1 Icebreaker—Have A Cherry**

Since this was the last class we had a different icebreaker. It was inspired by a member of the community. The members of the class were to take the stem of a cherry and try to tie it into a knot using only their mouth. There was a prize, a dolphin shaped soap, for the first four who finished the task in ten minutes or less. After ten minutes the class members that did finish the task on time described how they did it to the other members of the community.

**4.10.2 Module 2 Systems Thinking—Archetypes**

The first facilitator from the systems thinking group presented some of the archetypes and provided web sites addresses for systems thinking materials. The next facilitator discussed six archetypes. He explained how they happen and presented some effective strategies for dealing with them: limits to growth, tragedy of commons, fixes that fail, accidental adversaries and, shifting the burden. Then he led a discussion of these
archetypes in the workplace. To end the module, a third facilitator wrapped up what
the systems thinking group had done during the quarter and what needs to be done
in the future. The summary of what was done included: 1) The definition of systems
thinking, 2) The five (5) why’s, story telling, force field analysis, loop and archetypes.

They expressed that their group was hard to personalize, since all the other dis­
ciplines were internal and dealt with me and, systems thinking was an external dis­
cipline. The facilitator stated that in the future he wanted to go more internal with
systems thinking and would like to do more with the archetypes. In the next quarter
the systems thinking group wanted to pair things up across disciplines. They wanted
to do more with leverage points or strategies. The enneagram models were systems
dynamics, they saw what moved them up a level and, how they could go up more
often into the next level. They could be used to map a team in action. And last but
not least to study more organizational issues.

4.10.3 Module 3 Team Learning—What We Did, What Is
Still To Be Done

A facilitator from the team learning group established that he got feedback from
the community that they enjoyed the exercises but that they needed more time for
debriefing, so they decided to do a wrap up module. The first thing they wanted to
make clear was that team learning should not be confused with team building. He
explained the importance of icebreakers to team learning as a mean to learn a lot
about other people. The rules they set up were important to make people feel at ease
and comfortable. The flowmaster was important for time management. Personal
mastery was very important in enhancing everyone’s potential so that they could
get more from the team learning. The team learning group concentrated mainly in
communication, teamwork and listening. The facilitator explained that their group made this decision using the lists they had from the first class. The facilitator said that during this class session they were going to collectively reflect on what they had done.

The facilitator asked from the class members to think of an experience in which they were involved which was a team learning experience and to write them down. Then, to think of things that could have made the experience better. They could be real or imaginary. Afterwards, the class discussed a number of the experiences. Among them were, being part of: a basketball team, the Brady Bunch and Gilligan's Island episodes and, fraternity stories about theater scenes. The class also discussed real life team learning experiences in which the class members had been involved.

The next quarter the people in this group would like to: keep the rules for safe space and time management, take a field trip and do team building activities and, do more individual investigation. The facilitator claimed he felt better and more comfortable. the more he learned about others. They also want to learn how to learn about themselves and, have commitment to each other.

4.10.4 Module 4 Shared Vision—The Blender

The last module for the shared vision group was to create a collective vision for the class. The facilitator explained the process of the blender. The class members were to divide themselves into groups of four people. In the process the first two people would read their ideas about their vision for the class and the third person would blend their ideas together. The third person would read his/her own idea and the fourth person blends the new idea with the previously blended ideas. After
20 minutes all four groups reported their vision for the class and decided that they were not going to blend them together during this class because they represented the diversity of the class. At the end, a member of the community got nominated to blend together the vision for next quarter.

4.10.5 Module 5 Planning For The Spring Session

The community decided on the agenda for the next class and on how to welcome the new members of the community. There was a discussion of how everyone felt the first night they came to class and how did they want the members of the next class to feel on their first night. The community concluded the class with evaluations and gratitude, thanks and affirmations. The quarter ended with a final debrief as some members announced they would not be joining the class during the spring quarter since they were graduating the following week.
CHAPTER 5

THE COURSE, HOW IT ALL HAPPENED IN SPRING

The first meeting of the Co-creating learning organization II, Spring class was on April 4, 1998. The class met on Saturday morning from 9:00 A.M to 12:00 noon, in the same room as the Winter class. The professor of record, 3 coaches and 15 students constituted the community of learners. The student group consisted of nine (9) students that were part of the Winter class and six (6) new students that were added to the class. The new students were known to the community members since all of them were PPM students who had previously taken the Autumn leadership class with the professor of record.

All the discipline teams mixed disciplines as well as members during the quarter. In some cases, there were two different modules by the same discipline team since participants merged the boundaries among the teams.

5.1 Workshop/Playshop 11

5.1.1 Module 1 Icebreaker—Tell Me All About You

The first activity for the morning was an icebreaker. A community member distributed a hand out for the module which contained a survey. The survey ask for personal information about each student. After filling out the survey class members
went around the table and disclosed their answers for the rest of the community.

The survey asked of students the questions: 1) Where are you from?, 2) Education, 3) Enneagram or MBTI type, 4) Most unique job, 5) Craziest thing ever done, 6) Favorite book, 7) Favorite movie, 8) Favorite hobby, and 9) Favorite music.

Although scheduled for twenty minutes this exercise went on for an hour and 25 minutes.

**5.1.2 Module 2 Overview Introduction To Learning Lab: What Is This Workshop About?**

The professor of record gave a lecturette on the six (6) disciplines which included a brief explanation of the disciplines. He stated that the rules of conduct developed and used by the Winter class would be kept the same and that for each class session they would have a volunteer flowmaster. He instructed the community members that at the end of the class session they had to choose a discipline or cross-discipline group to work in.
Module 3 The Disciplines: What Are Senge’s Five Disciplines?—The Disciplines Discipline Design Group Reports

The third module of the morning was a report on what each discipline group had done during the Winter quarter.

The first group to inform was the Personal Mastery group. They reported that the previous quarter the group had focused on communication and spirituality. They had used different tools for centering to create a hospitable environment to make changes. The Personal Mastery group followed the feedback they had received from the use of the learning wheel competencies exercise done during the first class of the previous quarter.

The Mental Models group informed that the previous quarter they had explored the enneagram types through a series of exercises, lecturettes, discussions and homework assignments.

Shared Vision was not a top priority for the members of the Winter class and they did not choose to form a group to work on it. Therefore, the coaches took over this group's task of creating a shared vision and tried to establish: What the community was about, what did they want to accomplish and, how.

The Team Learning group, reported that during the previous quarter they had focused on several things such as: communication, listening and team buildings.

The Systems Thinking group looked at the underlying systems that were inherent in any situation or problem. The group members spent the quarter trying to figure out what the discipline of systems thinking meant and in the last class meeting they tried the discipline.
The Facilitation group worked on the concept of facilitation, which is co-creating and facilitating the relationships with other people. They looked at how to facilitate oneself, small groups and large groups. They focused on the tools used to guide facilitation and did an activity of planting a plant. In doing this activity, the group taught by example. The group co-created and facilitated relationships among the class members when they involved all the class members in the planting, naming and caring of a plant. The group described and applied what they were teaching and, the class members appreciated it.

5.1.4 Module 4 Co-Creating Learning Paths For Quarter—Learning Path

When all the groups had reported the community members divided into discipline and cross-discipline groups and met for 60 minutes to plan their modules for the quarter. Four groups were formed: 1) mental models—NLP (neuro-linguistic programming)/mental models. 2) systems thinking. 3) shared vision/team learning. 4) personal mastery/mental models.

5.1.5 Module 5 Co-Creating Our Client Organizations: Who Will We Serve?

One of the requirements of the course is to apply what was being learned in the classroom to a “real world” organization. This could be done at the place where the students were working or with an outside client. Some class members talked about the different opportunities to facilitate and observe facilitation with client organizations such as AFROTC.
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Table 5.2: Class 12 Organizational Plan

5.1.6 Module 6 Debriefing—What Worked And What Would Have Been Better If . . .

The last item of the morning’s agenda was the debrief. During this exercise the class went through a round robin discussion of what everyone liked and disliked in the evenings session. The key ideas of the debrief were recorded for distribution during the next meeting.

5.2 Workshop/Playshop 12

The class started without the professor of record, who had a previous facilitation engagement.

5.2.1 Module 1 Icebreaker—Child and Siblings

The icebreaker facilitator asked the community members to form four (4) groups: first born, youngest child, middle child and only child. The groups were to discuss their experiences in relation to their siblings while growing up. After ten minutes a representative from each group reported their findings to the community. The first born group reported that they had more responsibilities, but they also were the first ones to get major perks such as cars. The youngest child group agreed that they were always treated as the baby, got all the hand me downs, but also their parents were
more lenient with them. The middle children group said they were perfect and, the only child group reported they always had problems sharing with other people.

5.2.2 Module 2 Mental Models—Toothpicks and Paradigms

This group did a paradigm shift exercise. The facilitator passed out handouts with the definition and comparison tables of different paradigms. A paradigm is our most deeply held, unconscious set of assumptions and values. They are always taken for granted and they determine our expectations, frames the questions we ask and structures our approach to what we do. The group continued their presentation by doing some activities.

The first activity consisted of arranging sixteen (16) toothpicks into the shape of five (5) squares and then, to make 4 squares by only moving 2 toothpicks. There were several answers to this exercise. The next activity was to connect nine (9) dots to form three parallel lines of 3 dots each. Once again, the group had more answers than the facilitator had expected. Since the purpose of this activity was to explore assumptions, the facilitator agreed that even his assumptions for this exercise were incorrect.

The next two activities were to look at some drawings that contained two images into one and, by changing the position the observer could see two different images, such as a young lady or an old lady. Afterwards the community members observed and discussed the meaning of some Escher drawings, such as House of Stairs.

In those two activities the observers looked at examples of a paradigm and a paradigm reversal.
5.2.3 Module 3 Shared Vision—What is a Vision?

The shared visions group started a class discussion about shared vision. The main
topic of the conversation was: What is a vision?

In the discussion it came out that the vision statement doesn’t need to be a
grandiose statement. A community member stated that a vision can become a prison.
He explained that at the place where he used to work they had decided to win a major
industry award and, from then on everything they did was geared towards winning
the award. There was no creativity and nothing else could be done except in terms
of winning the award-they were bounded by that vision.

Other relevant issues discussed were:

• How do you accomplish a vision when you have no input and no ownership?

• How can people believe and put a vision to work when there is no commitment
to the organization?

• Many people that have visions do not have a strategic plan of how to accomplish
their visions.

• Visions should be short lived and accomplished on a yearly basis and, they
should change with the needs of the time.

• Sometimes the boss goes to a three day retreat, participates in creating the
vision and after he comes back throws it in the garbage can.
5.2.4 Module 4 Systems Thinking—Six Degrees of Separation

A facilitator from the Systems Thinking group asked the community members to organize themselves in four groups and have at least one movie buff in each group. Each group was to elect a recorder and a spokesperson. As a group they were to choose two famous actors from a provided or a self-made list. The theory was that, no matter which actor's name they chose, it would be connected in seven steps or less to actor Kevin Bacon. The facilitator gave the following example: Clint Eastwood starred in *The Rookie* with Charlie Sheen, who starred in *Young Guns* with Emilio Estevez, who starred in *Saint Elmo's Fire* with Demi Moore, who starred in *A Few Good Men* with Kevin Bacon.

After 10 minutes every group got to Kevin Bacon from the actor's name they had chosen in seven steps or less. The facilitator explained that the purpose of the exercise was to demonstrate that everything was intertwined. And, that the arts of systems thinking included learning to recognize the ramifications and trade-offs of the action they had chosen.

After the exercise was over the facilitator and the community of learners reviewed systems thinking, storytelling, the Five Whys, reinforcing and balancing loops, force field analysis, and the Five Archetypes.

A facilitator stated that a fishbone diagram could be done for the force field analysis. When asked by the community members, he explained the procedure to do it. A diagram was to be made of a cause and effect relationship in which a problem is viewed and the causes are mapped from a human, machine, method and, materials perspective. This diagram in turn, is used to create a force fields analysis, with the
things identified from the cause-effect diagram. The driving and restraining forces were to be used in doing the force field analysis.

When the Systems Thinking group finished their presentation, the community members took twenty-five minutes to design some future class sessions. The idea of holding a class at an outdoor or adventure group facility such as Recreation Unlimited, was proposed.

The professor of record reassured the new community members not to have anxieties about the past Winter Quarter community. That their past experiences did not create their future, that only the present created the future. For them the important question was, what did they want to learn now in this class. He asked the group to think about: Isn’t there where this learning community is now?

The professor of record explained to the community members that research was being done on emotional intelligence in order to establish how an individual’s emotions could be identified and, on how to id and release negative emotions. That there were books available on how the mind worked that explained the process to change any beliefs that were problematic and limited them, in order for them to embrace more of life. He stated that everyone could retrain their emotions in order to live in a world of joy, peace, love and, calmness all the time. And, that if it sounded good maybe that was the way for them to go.

5.2.5 Module 5 Planning

The professor of record continued by explaining that if the community members wanted to change their body, there was a number of exercises and people exploring that theme. Among these were the use of breathing exercises, which could make a big
difference in their lives. He added that there was a program - human dynamics, which could be used with the enneagram to talk about personalities and, that a person could be physically, mentally or emotionally oriented if they used this model.

5.2.6 Module 6 Debriefing

The debriefing of the class consisted in expressing what the community members liked about the class and what, according to them, needed improvement.

5.3 Workshop/Playshop 13

5.3.1 Module 1 Icebreaker—Nails On A Stick.

The facilitator asked the community members to form four (4) teams. Each team was provided a two by two inches wood square with a three inch nail nailed in the center of the square. The teams were to suspend eighteen three inch nails on this one nail, without touching the base of the board. All nails were identical. After twenty minutes of trying out different solutions, no group could come up with an answer. The facilitator showed the teams how to suspend the eighteen nails.

5.3.2 Module 2 Personal Mastery—Emotions

A facilitator from the Personal mastery/Mental models group distributed handouts to the community members with the objectives of the module and, a list of
emotions with their definitions. The facilitator delivered a lecturette based on the book *Emotional Hostage* aimed at bringing awareness about emotions by deepening the understanding of emotions, identifying emotions and, establishing the link of emotions with perceptions, beliefs and behaviors. The facilitator presented and discussed regret, guilt, anxiety, overwhelm, anger, hopelessness and frustration. The lecturette continued on how to recognize emotional messages and emotional choice, which emotions to experience and, how to experience them. This lecturette was the foundation for a series of modules developed and presented during the Spring quarter class.

After the presentation the community members talked about their emotions in a very outspoken and intimate way. They talked about the things they regretted having done or not having done and real life experiences were given as examples. On how they felt guilt when people violated a personal standard. On how anxiety differed with the occasion or context and provided real personal examples such as the anxiety of childbirth compared to the anxiety of air travel. The group was so interested that the discussion of anxiety lasted fifteen minutes. The community conversation continued with the discussion of guilt and, how anger was transmuted, someone wanted to add fear of the unknown to the original list of emotions and, other members suggested amendments to some of the given definitions of the original list of emotions discussed.

The conversation ended when the flow master pointed out that the group discussion was overtime and, the facilitator recapped the conversation. A member of the community complained that conversations should not be ended abruptly when they were having a good discussion and that the group should ask the community if they wanted to adjust the time rather than just finish up the module abruptly. This
commentary came from one of the new members of the community. Due to the good community receptivity the facilitator suggested that the Personal Mastery/Mental Model’s group could use emotions as a main theme during the quarter rather than just being superficial and stop at awareness. The facilitator concluded her presentation with her agenda for the team’s next presentation on ways to release negative emotions.

A class member presented the concept of parking lot. When someone has an idea or question that would make the conversation bifurcate, the idea can be parked and talked about later. The parking lot is divided into process and content. Someone asked the content question what did we do, how did we change them, how do they work for us. The process point is can we have time outs to re allocate time. Then there is the question of follow through and finishing, and allowing for the connections to unfold.

If you are facilitating write it on a post it note and put it back there.

The group handed out the Emotional Quotient instrument and asked the community members to take the test, score it, and bring it for next class.

5.3.3 Module 3 Systems Thinking—Mystery Topic

A facilitator from the Systems Thinking group gave a lecturette on organizations, organizations as a social entity and organizational growth. A second facilitator from the Systems Thinking group introduced the next activity as a mystery topic. The mystery topic was really systems thinking. The activity consisted of a role play in which the community of learners would play the roles of a senior management team dealing with change. A multi-page handout was distributed with a pre-set
scenario and an introduction of systems thinking. The facilitator explained the pre-set scenario, raised questions and added the systems thinking concepts to the story such as reinforcing and balancing loops.

The facilitator further explained that in that day's module the community members would be role playing senior management but, on the next class meeting there would be a second module in which they would role play the employees and view the same changes from the perspective of the employees. On a third session the community would sum everything up and a consultant would be available to comment what went right and what went wrong in the whole process.

The pre-set scenario consisted of the evolution of an organization under reorganization and what goes on in the workplace when solving a crisis. The purpose of the activity was for the community members to differentiate how the organizations go through the same change process and how the changes are driven by the same factors. In this case the crisis arose from a drop in the value/cost ratio. In this scenario the organizational purpose was primary, employment was a secondary value and value is something pursued by the customer. In organizational growth, change is always painful because people always live in a comfort zone.

A third facilitator from the Systems Thinking group presented the management dilemmas as being: How did we get here? How are we going to communicate to everyone? Are we going to resolve the crisis? A brainstorming process should be started and a consensus of what to do should be reached. The community members were not clear on how to do the brainstorming process. If they were going to discuss the dilemmas or the decisions, they didn't want to turn the situation into a chaotic one. The community members were extremely confused about their goals, role and
the amount of time that they had for the discussion. The facilitator explained that
the management's only goal was to fix the problem in half an hour. When asked what
the managers were trying to fix the facilitators said getting market share, customer
satisfaction, value to cost relation and customer input—which the group did not have.

The brainstorming started and community members used their work experience in
trying to solve the problem. Different solutions were discussed like mergers and who
would manage if done. After 20 minutes the facilitators said the only options left were
to demote or fire people, to close the units that have forgone their market potential
and strengthen the organization. Later, the facilitators conveyed the news that firing
people was a must, if they didn't do it they would disappear. The anxiety level in the
room rose when community members disagreed with the facilitator's solutions and
wouldn't accept them. The community members felt the facilitators were imposing
their opinions. They took a vote and decided for a non radical solution. From then
on some community members chose not to participate in the discussion.

The community took time out. Since the discussion took longer than budgeted for,
the Shared Vision group gave up their time so that the discussion could be continued.

At the end of the discussion the only thing the community agreed on was to find
out more information from all levels of the organization and to try and solve the
problem. No proposed solution was accepted by the community members who ended
very angered with the role playing of the situation. Some members felt attacked, very
tense and upset. The facilitators in turn were very disappointed. The facilitators
explained that the community members should trust the process and not seek closure.

Someone expressed he could not believe that change was always painful and would
like to challenge that assumption and put it in the parking lot. Homework was to write a journal entry about the module.

For the last activity of the morning the community sang happy birthday to a community member, cut up a cheese cake and debriefed.

5.4 Workshop/Playshop 14

5.4.1 Module 1 Icebreaker—Mystery Topic Debriefing

The facilitator for the icebreaker decided to do a debrief of the previous week's Mystery topic module. Although planned for 20- minutes the icebreaker went overtime, so the class regrouped and the mental models group volunteered to go next week.

5.4.2 Module 2 Systems Thinking—Mystery Topic Part II

The second module was a continuation of the previous week systems thinking module. The facilitator for the systems thinking group had been scribing the icebreaker’s discussion. The facilitator continued to explore the concept of facilitation from the reflection of the community members. One of the facilitators stopped the discussion after 80 minutes.
5.4.3 Module 3 Shared Vision—Inner/Outer Circle

A facilitator from the shared vision group reviewed the handouts about shared vision they had provided the previous session. Another facilitator started one of the two activities of their module.

The first activity of the module was to practice a new technique to create the class vision. The inner and outer circle technique consisted of making two concentric circles with the community members. Half of the community members sat around the classroom table making an inner circle and, the other half sat on chairs surrounding the people sitting at the table making an outer circle.

The people in the inner circle had the task of designing the vision for the class. They were to discuss the issue between themselves. The people on the outer circle listened to the discussion and, if they had questions, they could write them in a piece of paper and pass them to the people in the inner circle who would in turn read them aloud. The people in the outer circle could not make verbal statements at any time. After seven (7) minutes the people in the two circles switched places and continued the discussion with the same rules.

When the circles switched, the people in the new outer circle stopped the exercise to ask procedural questions to the facilitator to see how they could continue with their participation. Some members of the new outer circle did not want to give up control.

After seven minutes the facilitator from the shared vision group asked for more time from the group that was in turn to present next, since they did not have enough time to finish their exercise. The members of the mental models group agreed to postpone their module on perceptual positions for the next class session.
Table 5.5: Class 15 Organizational Plan

The exercise continued when a new shared vision facilitator asked the community members to create two new groups. Their task would be to frame the ideas previously discussed into a vision statement in the next ten minutes. Afterwards the groups would come together and the community would reach a consensus.

After the ten minutes were over a reporter from each of the two groups read their statements to the community. The community members merged the two vision statements into a shared vision that follows.

We are a dynamic expression of personal and group growth, characterized in a balance of challenge and support based on shared values connecting these processes to our other life experiences.

After agreeing on a vision the last activity of the morning was a debrief of the session.

5.5 Work Shop/Play Shop 15

The professor of record had to leave the community to attend to a facilitation engagement, and as always the flowmaster directed the class. For this class session the community members in charge of providing breakfast made “real” waffles and omelets. They had brought a waffle iron and an electric skillet, and both waffles and omelets were made from scratch upon request, for fellow class members.
5.5.1 Module 1 Icebreaker—Lateral Thinking

The facilitator distributed a handout with an exercise for lateral thinking and asked the community members to break into groups to try to solve four problems. The community members were to find a logical explanation for what appeared to be an illogical situation. In order to solve the puzzles people needed to break away from their usual mental models and assumptions and look for a new angle. Although everyone had different explanations, the class could only solve one of the four problems.

5.5.2 Module 2 Planning

The second module of the morning was planning for outdoor adventure class session. Several locations and diverse outdoor adventure programs were considered. At the end a member of the class volunteered to facilitate the outdoor activities. Planning also included the logistics and food for the day.

5.5.3 Module 3 Mental Models—Neurolinguistic Programming

A facilitator from the mental models group started the class with a general introduction to neurolinguistic programming (NLP) and a reminder to read the text Mindworks (1997) by A. Linden. She explained that neurolinguistic programming is tapping into our senses and the senses of others to improve communication. The facilitator distributed a handout for a NLP exercise, told the community there would be three NLP sessions and that the mental models group would focus in acuity on their first session.

The first exercise was centered on representational systems and eye-accessing cues. NLP advocates consider the eyes are windows to the brain. They believe that by
calibrating and observing a person’s eye movement, people would be able to discern the ways in which a person process and codes information. Calibration consists in observing sensory data and measuring consistency and difference. Eye movements is an indication of how another person is thinking. A person normally displays accessing or entry cues when they see, hear, or feel something, engage in talking to themselves, or experience an emotion. and whether or not the information is being remembered or constructed in the moment. The purpose of the exercise was to alert people to the existence of the representational systems and eye accessing or entry cues and to increase their acuity regarding these in themselves and others.

Representational systems are the perceptual filters used to control external input and the sensory systems people use to re-present their experience. Paying attention and matching the other person’s cues is believed to have strong implications for 1) establishing and maintaining rapport, 2) increase the ability to use or translate each of the various modalities and, 3) better use other parts of the human brain enabling:

- the enhancement of experience.
- increased ability to empathize.
- added information or resources to a person’s thinking and feeling.

The facilitator instructed the community members to get a partner, and read to them the questions in the handout while looking for their first eye movement. Then, to draw the eye movement answers next to the question on the handout. The first few questions asked were used to calibrate the person, the rest of the questions were used to establish how the person accessed information. After the exercise, the community discussed the results of the exercise.
The facilitator asked the community members to look at other people during the week to gain more experience with the concepts of the exercise. As homework the facilitator instructed the community members to listen to other peoples language. Sensory language, either visual, auditory or kinesthetic, is another indication of how a person is thinking.

5.5.4 Module 4 Personal Mastery—The Emotional Quotient

A facilitator from the personal mastery group asked the community members to form different groups according to their enneagram type. Then, instructed the groups to discuss among themselves the areas in which they needed improvement according to the emotional quotient (EQ) test they had taken, from the book *Executive EQ: Intelligence in Leadership and Organizations* (1996), by R. Cooper and A. Sawaf. The EQ questionnaire diagnoses competence in the emotional realm. It can pick up conflict, vulnerability, gaps and, connections.

The community members used the EQ to identify the potential areas to focus attention in their lives. The facilitator explained that their group wanted to see if there were any similarities between the enneagram type and the EQ.

Another facilitator was concerned with the use of language in the test. She cautioned the groups to take the test for what it was worth. Not to let the test tell them what they should be, because the words in the test were "loaded." After the discussion they had a debrief.

5.5.5 Module 5 Systems Thinking—Mystery Topic III

Facilitators from the personal mastery /mental models group presented, explained and discussed the fishbone diagram and the force field analysis as a continuation of
the mystery topic activity done previously. For their presentation the facilitators used a series of transparencies and gave a lecturette on both techniques.

The facilitators explained that the fishbone diagram was a problem recognition tool and the force field analysis was an option definition tool. They told the community members to re-read the scenario to determine the causes and the problem. A community member expressed concern about many of the terms used in the exercise such as value/cost ratio and market share, which were not priorities for government or state organizations and, stated the need to alter the model to work for the public sector.

For the facilitators most of the exercise consisted in re-explaining the scenario to the community members that worked in government organizations. The community members in turn tried to help the three facilitators from the private sector to understand how they did things in government and helped them see the problem from a government service point of view. In the community discussion came out that in the private sector the bottom line was profit, but in the government sector was how much service they provided. The community members talked about state agencies, city management and, election's issues such as welfare and tax levies.

The facilitators asked the community members to divide themselves into four groups, figure out the problem and causes and report to the community. When the groups reported their problem definition and the causes, the facilitators created the fish bone diagram.
5.5.6 Module 6 Team Learning—Body Language

A facilitator from the team learning group asked for four volunteers. The facilitator explained they would do an exaggerated exercise on body language. She explained that eighty percent of human communications was body language.

The four volunteers went outside the classroom into the hallway with the facilitator. They were instructed to carry on a conversation, about planning a vacation, displaying different types of body language while the community observed them. The four volunteers returned to the classroom and represented the conversation: 1) speaking positive and showing positive body language. 2) speaking negative with negative body language. 3) speaking positive with negative body language and 4) speaking negative with positive body language.

After ten minutes, the community discussed their observations about the correlation between the conversation and the body language in the exercise. The facilitator informed the community that the exercise was to be tied in the next class to the NLP module.

After the last module there was some time left before the debrief and the systems thinking group asked the community for feedback on their mystery topic modules.

5.6 Work Shop/Play Shop 16

5.6.1 Module 1 Icebreaker—Recipe For Summer Serendipity

The facilitator for the icebreaker gave a handout and asked the community members to write down five things they would do that summer for their peace of mind. She asked the community to share each person’s recipe for summer serendipity.
Module | Time | Discipline 1 | Discipline 2 | Title
--- | --- | --- | --- | ---
1 | 15 | Icebreaker | Mental Models | Recipe For Serendipity
2 | 5 | Systems Thinking | NLP | Mystery Topic Canceled
3 | 40 | Mental Models | NLP | Representational Systems
4 | 30 | Mental Models | NLP | Reframing and Anchoring
5 | 30 | Shared Vision | Team Learning | Service Learning

Table 5.6: Class 16 Organizational Plan

5.6.2 Module 2 Systems Thinking—Mystery Topic IV

The systems thinking group had a major meeting concerning the mystery topic. They informed the community they had made a major decision to finish with the mystery module. They realized that they got to the point where the group was stuck. Therefore, they relinquished their time to the community.

5.6.3 Module 3 Mental models/NLP—Representational Systems and Rapport

A facilitator from the mental models group introduced the NLP topic reminding the community that last week they had done a quick introduction of the topic and distributed a handout which hopefully they had read. The facilitator presented a history of the NLP as a field of study, discussed some NLP concepts from the handout such as rapport and awareness. She explained that NLP training usually takes about 100 hours therefore, they were just going to do an introduction to the topic and the concepts of the field. The facilitator gave the agenda for future modules of the topic.

The next facilitator from the mental models group asked the community members to divide themselves in pairs and tell each other about their weekend. While the conversation took place, each person had to identify the sensory language the other
person was using, whether visual, auditory or kinesthetic. She asked each pair to model each other’s posture as they listened therefore, every pair was modeling each other’s behavior.

After the exercise was over the facilitator commented that the NLP communication concepts in the handout were from *Mindworks*, one of the textbooks for the quarter. The concepts included were rapport, other-orientation, uptime, calibration, representational systems, behavioral matching, sameness or difference, backtracking, pacing and leading.

The exercise was on pacing which consisted of using the skills of rapport to align with another and, leading which consisted of moving the other person to another level of awareness in terms of thought or behavior by changing ones’ language, tempo, tone, gesture, or posture. The students were to identify these kinds of behaviors in the conversation they had.

The students took time to talk to each other about what they had noticed in terms of pacing and leading and, other NLP communication concepts such as backtracking, rapport, tonality and body language. Afterwards, the community discussed the exercises. The facilitator added that the homework was to practice pacing and leading during the week. As part of the discussion, some community members brought up concerns about their experiences in some of the exercises.

### 5.6.4 Module 4 Shared Vision—Service Learning

A facilitator from the shared vision group gave a lecturette on the concept of service learning and distributed a handout with guidelines for reflecting on shared
vision. According to the facilitator service learning is when a person have and educational experience through service. This included the concepts of reciprocity, inherent in service there was the opportunity to learn about the people and agency where service was being performed and reflection, which added depth to the experiences and allowed the person to process thought and feelings. He stated that the criteria for effective reflection were:

1. continuous
2. connected
3. challenging
4. contextualized

He added that three questions that could help their community to reflect on a shared vision were: What? So what? and, Now what? That those questions were broad, but provided good in depth discussion and could be used to talk about their shared vision.

He continued saying that in the Fieldbook, the mental models chapter talked about reflection to slow down the thinking process, to become more aware of how people formed their mental models, and to explore their relationships with other people. He also pointed that the chapter had a lot of rich discussion on scenario planning and mapping.

A second facilitator form the shared vision group led the discussion about the shared vision. She explained that in each class they would take the opportunity to reflect on previous modules in relation to the shared vision. She stressed that she knew what she had learned and wanted to know what others had learned.
The five minute discussion began with a community member who wanted to talk about what they had learned in the previous class. He complained that there should be a balance between challenge and support, and during the last class there was a lack of support. Another person explained that there was no challenge because it was an artificial situation. It was not a personal experience like the one brought to class on that day, where everyone wanted to help to solve it. Maybe they should have used a real case study instead of a scenario and role play.

Another community member expressed that he realized that their community had a systems thinking structure that was built up since the previous quarter. For him, the real problem with the scenario was that it didn’t match the groups systems thinking, and there was a backlash because of the different dynamics. It was a very important lesson to see two different structures of systems thinking that didn’t match. Another community member explained that being stuck meant they were not learning. The facilitators realized it and moved beyond that fact to focus on something else.

The conclusion of the class was used for planning next week's session, mainly the types of food needed for the picnic and the debrief.
5.7 Work Shop/Play Shop 17

5.7.1 Module 1 Icebreaker—Questions In A Hat

Community members picked up questions from a hat and answered them for the community. The questions ranged from, singing your favorite song to, defining a moment in your life.

5.7.2 Module 2 Team Learning—Mode Of Transportation

A facilitator from the team learning group sorted the community members into two teams, red and blue. The blue team stayed in the classroom and the red team went to the hallway with another facilitator. Both teams would solve the same problem, the need to develop a way to transport an average family and all their stuff, but each team had different ways of working.

The blue team had to start work individually, each person had a different feature for the transportation that the others didn’t know about. It had to be either, economical, convenient, environmentally sound, safe, innovative or aesthetically pleasing. Afterwards, they had to work collectively as a team and choose only one mode of transportation that had all those features in 60 seconds.

The red team had to work collectively to solve the problem but, all of the same features were given at once to all the members of the group when they started the exercise. Both groups were to report to the community.

The purpose of the exercise was to model group process. They modeled situations in the workplace where a newcomer didn’t know where the rest of the group was going, how the team members worked apart and together and, how team members converged. They also wanted to see, if both groups would come out with a generalizable answer.
The blue team reported they had worked by themselves and individually established: 1) a mini-van as economical, 2) a car as convenient, 3) a horse and buggy as environmentally sound and innovative, 4) a horse drawn carriage as safe, and 5) a zeppelin as aesthetically pleasing. When they joined as a team they were given sixty seconds to agree on a single solution. The team shared ideas and established the mini-van as the transportation that had all the desired features.

The red team reported they converged quickly and became a team in the first few minutes. They talked about solar power, water wheel and fuel source. Someone proposed a sailboat and they choose it as the transportation that had all the desired features. The red team finished their task and socialized. A community discussion about team learning ensued.

5.7.3 Module 3 Mental Models/NLP—Shifting Perspective, A Recipe For Choice

A facilitator from the mental models group explained that shifting perspectives was used in unproductive reactions with others and relationships or situations in where they were stuck. Shifting perspectives allowed a person to be in the other person’s shoes as well as their own and to observe both persons from a dissociated position. The exercise encouraged empathy, dispassionate observation and increased choice by changing the angle of perception or point of view of the interaction.

The facilitator asked the community members to think about an interaction with a particular person that was troublesome for them. Then, to set up three chairs or positions of self, observer and other and, to live through the interaction from each of the three positions allowing themselves to have the emotions contained within the
situations. Afterwards, they had to reflect on their experience and, review the new insights and information gained.

5.7.4 Module 4 Personal Mastery—Drama of Control

The next module was also by the NLP group dealing with personal mastery. The facilitator stated that in relationships there was a question of control, which they wanted to explore and, had called the drama of control. The facilitator distributed a handout and read the introduction. The introduction stressed that in a relationship the point is: to get the truth out in the open, to project love and understanding toward the other person and, trust oneself to know when to speak. The control drama positions are the: intimidators, interrogators, aloof and, poor-me. The facilitator used the handout to discuss with the community members the control drama positions and their outer behavior. She explained that the intimidator and the interrogator had an aggressive outer behavior, the aloof and poor me had a passive outer behavior. She also discussed how the control drama positions made the other person feel and discussed its matching drama. She also discussed the different approaches the other person could use to deal with each of the drama positions.

5.7.5 Module 5 Planning

The community took 20 minutes for planning the picnic and whitewater rafting trip.

5.7.6 Module 6 Systems Thinking—Mystery Topic IV

The Systems thinking group canceled their presentation on Mystery Topic IV.
5.7.7 Module 7 Shared Vision—Vision Review

The shared vision group took five minutes to review the community’s shared vision.

The last activity of the morning was the debrief.

5.8 Work Shop/Play Shop 18

The class agenda was designed by a community member who facilitated the outdoor adventure type day. It was not distributed to the community. The learning community met at a public park 5 miles from campus. The facilitator for the entire day was a member of the Mental models /Team learning group. She had worked in outdoor adventure programs and designed the class session for team building.

5.8.1 Module 1 Icebreaker—Have you ever ...?

The icebreaker was an exercise called “Have you ever?” The objectives of the exercise were: risk taking, self-disclosure and, rapport building. The community members stood in a circle and each member took a turn to ask of the community...
the question Have you ever ...? followed by some activity. The community members that had performed the activity would take a step back.

5.8.2 Module 2 Introduction To The Day

The facilitator introduced the day with a presentation of the foundation and history of adventure education, setting the tone for the day's activities.

5.8.3 Module 3 Progressive Warm Up

The facilitator asked the community members to arrange themselves in a circle and do a micro/macro sound off by saying aloud the words “micro” or “macro”. Afterwards the community would do a progressive warm up in which each person would do either a micro or macro movement. Community members volunteered to do their movement at any point. Different kinds of movements were done such as stretches, jumping jacks, nursery and school songs, breathing and isolated movements.

5.8.4 Module 4 Lecturette on Adventure Programming

The fourth activity of the morning was a lecturette on outdoor education. The facilitator stated the intentions of Adventure Programming were to:

- increase personal sense of confidence.
- increase mutual support within a group.
- develop increased level of agility and physical condition.
- develop increased joy in physical self and being with others.
- foster appreciation and respect for differences existing in a group.
• develop an appreciation of interdisciplinary nature of problem solving.

• stretch individuals beyond their self-perceived limitations.

• have fun in a safe manner.

The facilitator continued with an introduction to situational debrief. The facilitator explained that the exercises would increase the participant’s sense of confidence and make them more capable and competent via graduated risk and challenge by choice. She added that challenge by choice was done in an attempt to stretch self-imposed limitations. Participants should allow the spirit of adventure to take them on their journey of:

• trial and error learning,

• sequential vs. haphazard thinking,

• divergent vs. convergent thinking,

• green light/ red light thinking and.

• intelligence trap syndrome.

They should trust and allow themselves to explore. The facilitator added that while doing the exercises the community members had to have in mind:

• safety

• sequencing

• choice
• shadow leadership

• processing

5.8.5 Module 5 Totem Pole Shuffle

The facilitator introduced the Totem Pole shuffle as an adventure programming exercise about getting up close and personal. She described it as allowing:

• a risk taking challenge and test of old mind tapes,

• chunking away at a goal with continuous improvement.

• building opportunities or ideas.

• communicating and, sharing their vision,

• a different kind of listening, observing and questioning.

At the beginning of the exercise the facilitator asked for two volunteer coaches that would be spotters and aid her with the facilitation of the Totem Pole exercise. She asked the rest of the community members to stand in line next to each other touching, on top of two cement dividers laying on the floor parallel to each other, that marked the road edges at the park. The dividers were similar to the cement dividers used to mark parking lots. The community members were to move over other members to align themselves in chronological order according to their enneagram number and within that number to align according to month and day of birth, without falling. They could not talk to each other during the entire exercise, but they could laugh or use body language to communicate. If someone fell everyone had to go back to their original position and start the exercise all over again. The spotters were in charge
of safety and, spotted member who fell signaling the community they had to start all over again. The community started nine times before completing the exercise. The community members had to hold each other as they passed each other along the line since they were all moving along on limited space. There was a lot of grunting and clapping as means of communication. When the exercise ended the community discussed it.

5.8.6 Module 6 Trust Sequence—Falling

The facilitator introduced a sequence of trust falling and levitation exercises by stressing that adventure education was challenge by choice. She also talked about the meaning of trust. According to the facilitator trust was:

- risk taking, taking responsibility and giving up control.
- trust in self and others creates freedom.
- assessing what we need to take risks.
- mutual caring and support.
- asking for help vs. waiting for it.

She established that safety nets were necessary to have the freedom to make mistakes and, that worse case scenarios rarely happen.

The facilitator asked a community member to help her with the first falling exercise, since it was to be done in pairs. The volunteered person was the faller and the facilitator was the catcher. The faller stood up straight, feet together and, hands in front crossed over the chest with interlocked fingers. The catcher stood behind her.
in a receiving position with one leg in front and the other behind and, both hands up front facing the back of the faller. The faller yelled “falling” to signal she was ready to fall. the catcher yelled “fall on” to signal she was ready to catch her. The faller let herself fall on her back and, the catcher stopped the fall putting both hands in the faller’s back shoulder height then, returned her to the original position. The community members did the exercise a number of times switching positions.

For the second “falling” exercise the facilitator asked for two volunteers. In this exercise the faller stood in the middle with a catcher in front of her and another catcher behind her. The faller and catchers stood up the same way they did in the first activity. The faller yelled “falling”, chose either to fall on her front or back and fell after the catchers yelled “fall-on”. The catchers stopped her fall and retrieved her to her original position in a teeter-totter fashion. The community members did the exercise a number of times switching positions.

5.8.7 Module 7 Group Lift or Levitation

The facilitator asked the community members to stand in a circle around her. She was the faller and, they had to catch her using the same catcher posture as in previous exercises. The faller chose the direction of the first fall and yelled “falling” the group yelled back “fall-on” signaling that everybody was ready to catch her. She let herself fall and a catcher stopped her fall, then passed her on to another catcher and, they kept passing her around the circle using a teeter-totter motion. Afterwards, she was raised to shoulder height by the circle. levitated. rocked. turned sideways to her left then to her right. levitated again and. then they put her down.
The community members did the exercise a number of times switching the person in the center position.

5.8.8 Module 8 Production Problem

The last activity for the morning was a production problem. The objective of the exercise was to transfer the product from one opened coffee can into a bucket using only the provided materials. The group was given 2 ropes, 3 bandanas, 4 metal climbers rings, 3 elastic cords with hooks at the end of different length ranging from 4 inches to 10 inches.

The set up was an outer circle of 20 feet in diameter and an inner circle of 2 feet in diameter. Inside the small circle, which was placed in the center of the larger circle there was an open coffee can with some product inside, and a metal bucket 1 foot wide and 2 feet tall.

The rules were that only the resources provide could be used, no one could step into the circles. the resources could only touch the ground within the inner circle. If the resources touched the ground that divided the inner and outer circle all the resources had to be taken back and start all over again.

The group tried different solutions to the problem by using one rope, then the two ropes, and finally using a rope, three climber rings and the small elastic cord. After several failed attempts, more or less 30 tries, the community solved the problem. For the final solution to the problem they tipped the bucket on its side, then they tipped the coffee can inside the bucket and finally they returned the bucket to its upright position with the coffee can and all its contents inside the bucket.
After the activity the facilitator asked the following question to guide the discussion:

- What worked?
- What can be improved?
- What team behavior helped or hindered in working towards the goal?
- What did they need to do different in order to be more efficient?
- What did they need to do different in order to be more productive?
- What else did they learn?
- What were the implications for transfer to their job?
- What were the implications for transfer to real life?

5.8.9 Module 9 Energy and Cleansing

The last activity of the class was offered by a different community member—a Peruvian shamanistic cleansing and drawing forth of energy. The community formed a large circle and three volunteers at a time stood in the middle of the circle. Then the volunteers chose which activity they wished to experience either the cleansing of energy or the drawing forth of energy. The community then, walked toward the people in the center of the circle collecting with their arms the energy from the ground, going up across the people and releasing the energy up to the sky or showering people down with the energy. This was done three times for each group of three volunteers who stood in the middle of the circle.
The activities of the morning concluded with the final debrief. The facilitator told the community members to:

- Take personal credit for what they had achieved and learned about themselves on that day.

- Give recognition to other members of the community and share it with the community in their feedback.

She also asked them to talk about new questions they had about themselves and how they would use what they learnt on that day in other situations. According to the final debrief, among the things the community members learned and/or practiced in the adventure type day were:

1. Communicating effectively.

2. Deferring judgment.

3. Expressing appropriate feelings.

4. Listening.

5. Appreciating self and others.

6. Respecting human differences and commonalties.

7. Leading others.

8. Following others.

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<tr>
<th>Module</th>
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<td>Vision Review</td>
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Table 5.9: Class 19 Organizational Plan

10. Making group decisions.

11. Liking oneself.

12. Cooperating.

13. Trusting the group.

After the final debrief the community had a picnic for lunch.

5.9 Workshop/Playshop 19

5.9.1 Module 1 Icebreaker—Win As Much As You Can

The facilitator divided the class into two teams based in who was wearing socks and who wasn’t. Then she gave each group a sheet containing the instructions that the objective was to win as much as you could. This was the classical exercise. After the icebreaker was over there was a short debrief of the activity.

5.9.2 Module 2 Systems Thinking—Mystery Topic, The Saga Ends

A facilitator from the systems thinking group draw closure to the mystery topic. He explained that what they wanted to do with the exercise was to have a dynamic
simulation that showed how people truly behaved. To do this the group decided to do a scenario. They also planned to show with their simulation how each of the other disciplines interacted with systems in the following ways:

- Systems thinking - view a project objectively.
- Mental models- find out cognitive bias. We could only reflect on what we perceive.
- Shared vision- Could we developed a common understanding of a problem? Could we find a common purpose? Could we find at the organization
- Team learning- mistakes in the process and feedback. Problem solving techniques.

The facilitator reviewed all the problem solving techniques they could not do for lack of time and gave his opinion of what had happened according to theory. Table 5.10 presents a summary of the techniques the systems thinking facilitator explained in the lecturette.

Table 5.10: Systems thinking techniques.
A second facilitator from the systems thinking group led a discussion of the whole Mystery Topic experience using some guide questions. Before the discussion started the facilitator apologized to the community as some members of his group had realized the group had violated some of the community norms and then they were caught in the paradox between continuing the module as planned or as it emerged from the different discussions and debriefs.

The three questions that guided the hour-long discussion were:

1. Did it reveal any underlying systems that relate to you?

2. Our co-created learning environment functions on certain principles—what was it about the mystery topic that did not follow the principles?

3. If we are faced in the future with a situation like the above—how can we turn it into a co-created environment?

The discussion that ensued centered around the following central ideas:

- Tension of asking people to play the private arena game vs. public arena game.
- Competition not cooperation.
- Win-lose frame of mind.
- CCLO is designed as a non-hierarchical organization, and the game was designed as a hierarchical organization.
- No options, when we were about options.
- Mental model that in a team environment if a team member leaves (i.e. firing), the team fails.

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• The title itself creates a wondering. If one of our core values is openness and communication. How does that runs counter to the core value?

• Importance of sharing information frame and context.

• Importance of fostering mutual trust.

• Importance of challenging assumptions.

The presentation ended with a testimonial from the facilitator stating how much he had learned and grown form the experience. He also thanked the community for the opportunity to accept mistakes as part of the learning process.

5.9.3 Module 3 NLP—Circle of Excellence

A facilitator from the NLP group summarized the groups work for the quarter into the premise that NLP provided tool for thinking about different options to solve communication problems. She stated that one of the propositions of NLP is “you have all the resources you already need.” She continued, that to tap into those resources the next facilitator was going to teach the Circle of Excellence technique.

For the activity the whole group stood up and stood behind each persons chair. The facilitator instructed to focus on a situation in which the participants wish to change their reactive pattern. Then connect with the internal resource that would allow you to shift the pattern. Then the participants recalled a time of personal excellence and anchored it in the body by some kinesthetic means such as pressing two fingers together, participants then created the possibility of recalling this resource state available to them any time they chose to use it.
5.9.4 Module 4 Mental Models/Enneagram—Know Thyself

A facilitator from the mental models distributed a handout from the book The Enneagram of Love and Work, by H. Palmer. Then he led a discussion on enneagram and interpersonal relationships and asked members to share their insights on interpersonal relationships. The discussion centered around the different enneagram numbers and what the class participants had learned about themselves and their relationships during the course of the class.

The last activity of the morning was a final debrief.
CHAPTER 6

WORKING WITH THE WHOLE WHILE LOOKING AT THE PARTS; ANALYSIS, SYNTHESIS AND INTERPRETATION

6.1 The Co-Created Course, Case 1

As the story of co-creation begins, I will describe the primary curricular components and events that ensued. I begin with general comments about the first class session and an overview of the organizational framework for the course. Then I discuss the major events by reviewing the intent and the specific processes used by each discipline team. This includes some illustrations of the community members actions, reactions, comments and dialogues to certain team’s individual modules or the sequence altogether using data from the interviews, observations and class documents.

The narration is sequenced to tell the story of each discipline team. The icebreakers, the class debrief and the individual learning contracts are also discussed as a coherently sequenced set of activities. These activities were a significant feature of the course, but they were created by community members and not planned by any discipline team.

The icebreaker and debrief had emergent properties. The class engaged in double loop learning by adding features, such as the flowmaster, as needed to the organization
of the class. The concept of self-organization became prominent as each individual interacted with the community either as an individual or a team member of a discipline team.

6.1.1 The First Night—An Introduction to the Course

During the first evening the purpose of the class was introduced in a series of lecturettes and exercises. The professor-of-record framed the course purpose of co-creating a learning organization. His lecturette stressed:

How do we make these things happen? .... If we practice the 6 disciplines we will make this a miniature learning organization.

The workshop participants were expected to “engage in learning experiences to build personal mastery of strategic leadership, teaming, and learning organizations.” The basic objectives of the class were discussed later in the evening and were stated as follows:

- To provide an understanding of strategic leadership in the public and third sector learning organizations.
- To build personal action and facilitation skills in selected practice and competency areas of leadership, teaming, and learning organization (and networks).
- To provide facilitation services to client learning organizations.

Appendix A and Appendix B contain the guidelines for the course.

Many participant’s expectations during the first class session were that the course would be an experiential course in which the ideas first introduced in the strategic leadership class would be used and developed.

The first night session was introductory in nature and presented the general ideas and the process of co-creating a learning organization in the classroom. As illustrated
in the dialogue from the video taped observations, the organizational framework for the class included the:

- Conceptual framework
- Agendas framework
- Discipline team collective work
- Individual work

Beside informing participants as to the framework and expectations of the course, the first class session was designed to provide the participants experience with some of the pedagogical techniques and instructional modes of learning they were about to co-create. The first class provided an introduction to the concepts of: lecturette, learning module, experiential activities, planning and debriefing of the modules and of the class session. Class participants became aware of the fact that in this class they were expected to engage in self-exploration and co-creation.

The evening was composed of a series of personal exercises to elucidate different types of learning experiences. The main production exercise of the evening was one to discover the class expected learning outcomes. For this exercise the facilitator used the affinity diagram process. This process was used to elucidate which of the leadership competencies participants wanted to engage and explore during the quarter. Appendix C illustrates the leadership competencies.

That evening the participants divided into their discipline teams. Each discipline team co-created a minimum of three exercises or Modules during the quarter. Students remained in their teams for the entirety of the quarter. The emergent themes
that the teams dealt with within each disciplines were: 1) change. 2) culture. and 3) community. Within these themes, the topics of beliefs and assumptions, values, communication. and safe-space were explored.

Before discussing the discipline teams it is important to discuss the learning contracts. Although discipline teams began their work without having each person’s learning contract, they had the feedback from the affinity exercise on a set of post-it notes. These topics gave direction to develop the first sequence of modules. The assigned readings from Senge et. al.(1994). Riso and Hudson (1996). Palmer (1991) and Hunter et. al. (1995). also provided some guidance and direction for the second week of class. The learning contracts were due on the second class. and were distributed to the community on the third class.

The first night was co-created by the coaching team, therefore, it was in a way different from and similar to all the other nights. It was different in the fact that the coaching team facilitated the entire night. It was similar in the fact that it engaged the whole community in several activities. Feedback from class participants captured in the class documents illustrate that they enjoyed:

Being back in the classroom, the learning modules, the team focus, the student learning focus, having their own learning objectives, the continuation of the learning networks established in the Strategic Leadership course, the use of the agenda, the class size, the topic selection, the momentum of the evening, the class process and the class diversity.

Members of the class suggested improvements and requests which the facilitators for the next class tried to follow. Some of these requests were:

Allow for more planning time, more time for overall understanding, start and end on time, icebreakers on getting to know each other, more movement, clearer guidelines and more clarity in direction.
The amount of materials distributed and number of activities performed were overwhelming for some of the community members. Since the entirety of the three hours was planned, some of the members felt cognitive overload. Participants who had not taken the Strategic Leadership class had only a vague idea of what to expect. At the end of the first class participants had to engage in co-creating the agenda for the next session.

6.1.2 Learning Contract

One of the main features of the class was the learning contract. At the beginning of the quarter each student created a personal learning contract, which was distributed to all the members of the community. While there was diversity in the learning contracts, there was a connecting thread among the themes in all the contracts. The main topics that emerged from the learning contracts were communication skills, community building skills, and many personal skills such as a need to work on self-understanding, self-esteem, emotional competence, self-awareness, identity, role confusion, intimacy, and empathy skills.

Each learning contract contained five personal or professional goals that each student was going to focus on individually and collectively during the quarter. The learning contract included five sections:

1. Learning Objective

2. Learning Activities

3. Learning Resources

4. When
5. Learning Outcomes

What was striking about the outcomes of the learning contracts was the similarity of responses despite the perceived diversity of the community. Participants found that the sameness of what people wanted signaled that a lot could be accomplished in the class. The following quotes from the learning contracts distributed to the class members illustrate the average learning objectives for participants in the class:

1) Become a more effective facilitator. 2) Learn how to help others become more self-reflective. 3) Learn more about expansionist thinking and understanding the whole, how to apply. 4) Learn how to build community in a learning organization. 5) Explore how to inspire/motivate toward a shared vision.

1) Learn to maintain an optimistic attitude at all times. 2) Learn my strengths and weaknesses and how to best deal with them. 3) Learn to listen more, and think before speaking. 4) Learn to believe I am competitive for the jobs I want. 5) Learn to better share my feelings with others.

1) I will strive to focus on the triangle while staying mindful of the circle. 2) I will try to eliminate the presupposition I have regarding the principles this course teaches. 3) I will work on my intimacy, both in my organization and in my personal relationships. 4) I will strive to understand my personality types of others that I work with. 5) I am going to limit television watching to one hour daily (except the Super Bowl).

1) Be less dependent on the rules and suggestions of authority figures, and try to think for myself. 2) Learn to provide an outlet for my emotions and not hold them inside. 3) Learn what personality type I am, and its strengths and weakness. This probably goes along with the two goals above. 4) Learn how to identify the personality of others around me from their behavior, actions. 5) Be a good person, boyfriend, friend, colleague.

1) Who am I? 2) Increase my effectiveness (find my motivation and understand it). 3) Increase my ability to inter-relate with people, understand. 4) Learn sense of balance. 5) Recycle, above all learn to evolve.
The themes of the learning contracts were used by other community members to design learning modules. The learning contracts also serve to frame the individual experience and growth that each participant expected to accomplish during the quarter. Questions as "Who am I?, " in one contract were echoed and answered by some other member in a different contract. "Be a good person, boyfriend, friend, colleague." Many of the objectives of the learning contracts were addressed by team modules throughout the duration of the class.

6.1.3 Personal Mastery Discipline Team Sequence

The personal mastery team co-created a sequence of six modules. They presented the modules during weeks 2, 3, 4, 5, 7 and 8. Their main focus was change and culture. They also worked on spirituality as their secondary focus. Most of the personal mastery modules took place after the icebreaker, except for the module on risk taking which took place at the end of the evening before the final debrief. The personal mastery discipline team focused on teaching different techniques to release stress through breathing and meditation.

The personal mastery team did a cohesive sequence of modules based on the information they had acquired from the class during the first night. The personal mastery modules created a relaxed environment where the co-creation of community and the realization of the other modules could take place. The team co-created activities to stretch the community personal resources and examine their perceptions, assumptions and beliefs.
<table>
<thead>
<tr>
<th>Class</th>
<th>Module</th>
<th>Title</th>
<th>Level of Integration</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>4</td>
<td>I Believe...</td>
<td>Mental</td>
</tr>
<tr>
<td>3</td>
<td>2</td>
<td>Breathing</td>
<td>Physical</td>
</tr>
<tr>
<td>4</td>
<td>2</td>
<td>Personal Vision</td>
<td>Mental</td>
</tr>
<tr>
<td>5</td>
<td>2</td>
<td>Meditation And Eulogy</td>
<td>Emotional</td>
</tr>
<tr>
<td>7</td>
<td>2</td>
<td>Spirit Journey—Lady Of Cholula Meditation</td>
<td>Spiritual</td>
</tr>
<tr>
<td>8</td>
<td>3</td>
<td>Time Management</td>
<td>Mental</td>
</tr>
</tbody>
</table>

Table 6.1: Personal Mastery Discipline Team Modules

The personal mastery team co-created a sequence of exposing values. They began with a sequence of eastern meditations and breathing exercises. These type of exercises are contemporarily used in stress management classes. As classes progressed the breathing exercises culminated with a trance exercise.

The personal mastery team provided the tools for self-exploration, centering and change. They began with personal change and moved to professional change. As the learning contracts had stated, community members were aware of their need for self-awareness and change. Self-exploration, self-awareness and change helped the community members develop a well-thought vision of who each participant was as an individual which in turn, was helpful to create a community vision.

The personal mastery team first module was focused on surfacing beliefs. The feedback this team had gained from the affinity diagram exercise sent them in a “non-traditional, self-directed, and spiritual” direction. Students took risk and expressed some of their deeply held beliefs as illustrated by data from the video tapes:

No matter how controversial. The more controversial the better. I want to foment a fun discussion. Basically. I am trying to get at the spiritual and nontraditional.
The “I believe” exercise tried to get to the core values of the community members. Some of the values expressed and scribed for later discussion and reference were:

- Many religions (2).
- After-life.
- Scripture, the Bible.
- Freedom of religions.
- Spirituality to cope.
- Religion-love.
- Absolutes.
- Higher being.
- Coke is better than Pepsi.
- Anti talk-shows.
- Communism is better than capitalism.
- Equity and fairness—non-judgmental.
- No harm to others.
- Purpose/spirituality (3).
- There is no evil.
- To be a good Christian is to be a socialist.
- Self-determination—find our purpose.
- Do no harm—Freedom of choice.
- Reincarnation.
- Spirit world.

These statements were not dissected in a controversial sequence. The meaning of some of the statements was explained afterwards but the community did not challenge any of the statements. Diverse points of view were expressed, and the community members agreed to disagree.

The next exercise on the personal mastery sequence was a breathing exercise. This exercise was used to create a serene frame of mind, to help participants engage in the
creation of a personal vision. This module helped participants collect their focus in the moment. As a centering exercise, it helped to quiet down the stress of everyday life and placed the participants in a state ready to focus on them-"selves." The following quotes from the video taped observations illustrate these emergent points.

I want to review what we have been doing so far. Personal mastery 101. Believe it or not there is a plan. I have been working with spirituality. All that breathing was for a reason. We wanted to make you aware that your attention is generally free, scattered. Using certain techniques like breathing you can gather your attention... The second step is to focus that attention.

The exercise that followed the meditation was done to create a personal vision for every member of the class. The individual visions were not shared with the members of the community since they were considered personal. Choosing a core value for the vision was a difficult task for many participants. For them, getting to the core values was "hard, difficult, impossible, confusing, and eye-opening." Once again the personal mastery team began the class with a meditation.

As you order your breathing you order your mental, emotional and spiritual condition... If we consciously work on our physical state we can change our emotional state.

This exercise focused on what each member of the community wanted to be remembered by. The exercise brought up different emotions for community members. Community members wanted to be remembered from their character; the personal characteristics and values that they cherished. Following is a summary of the thoughts shared by participants with the community from the video taped observations:

He would if he could.
Fair and honest.
Funny guy, he wanted Staying Alive playing at his funeral.
He fulfilled me. He had integrity.
She provided moral support. Dedicated.
Don't worry about us.
Let people care more about families than work.
Orderly.
People would talk about the good times we had.
Loving.
Smile or his face always had a smile.
He was content with who he was.
She was a good friend.

Not one student mentioned work, school or any accomplishments outside the personal/intimate realm.

The most powerful and intimate experience was the Lady of Cholula meditation. The meditation lasted for 20 minutes, and an effect of the meditation was that the majority of students were in a trance-like state. The facilitator introduced the meditation with the statement:

Believe it or not there is a plan. I really hope you are skeptical because I want you to have an experience... Since this trance offers the opportunity to ask personal questions, the response to the questions is the primary experience, often received as a very direct, sometimes even, verbal message. The Lady of Cholula is lovingly, supportive, giving practical advice, motherly care and encouragement. This opportunity for divining for very personal reasons distinguishes this trance from many of the other divining postures. (see appendix E)

Class members liked this meditation. This exercise was a new experience for all students. While in the trance some students felt comfortable listened to the soundtrack of the rattle, others felt uncomfortable for a short period of time. For many community members the experience was very intimate and personal.
Although not shared with the community as a whole, many of the class participants received answers to their questions. Since the exercise was personal, participants started discussing the “safe” aspects of the exercise.

Although not shared with the community as a whole, many of the class participants received answers to their questions. Since the exercise was personal, during the taped part of the data collection, participants started discussing the “safe” aspects of the exercise.

The rattle was too loud.
For me it faded in and out.
This is a new meditation from me.
The position was uncomfortable. I found it hard to breathe.
At first I was annoyed by the position and the sound. after a while something changed.

During the break, the conversations became more personal. Participants shared their experiences on a one-to-one basis. During the break, the conversations became more personal. Participants shared their experiences on a one-on-one informal interviews:

I lost track of the rattle. Did you feel like you lose ground? I had a physical sensation.
I found more relaxed my mind was going everywhere. it was like opening flood gates.
I had a hard question and I didn’t really wanted an answer.
I got a lot more information than I was asking for.

Many participants visualized an encounter with a loved one. Although she received a message. and answer to her question she expressed “I didn’t like it. It was not the response I was expecting.” After we discussed the event she realized that the answer
was correct, and made sense but she realized that “you don’t always get what you want.” Similar events were disclosed in some of the other personal interviews, since the outcomes of the exercise were not ones the participants wanted to share with the community.

The final module in the series was an explanation and exercise on time management. This module was part of the sequence but it dealt with a tangible skill, how to organize the day. This module did not generate the amount of feedback or discussion that the previous modules generated.

The personal mastery module series combined very intimate and personal experiences with thought provoking community discussions. The focus on personal mastery was one of the major goals of many of the community participants and the personal mastery team. This team co-created the largest amount of modules dealing with individual/personal work. Community members appreciated all the unusual work and discussions that the team had encouraged during the quarter.

6.1.4 Mental Models Discipline Team Sequence

The mental models discipline team co-created six modules on weeks 2, 3, 4, 5, 8 and 9. On classes 6 and 7 the team gave assignments for journal entries or for future class discussion. The mental models team presented most of the time the second major activity of the night. The scope of the modules went on a continuum from impersonal to extremely personal. The mental models group focused their sequence on exploring personality type as it is explained by the Enneagram. They presented from enneagram modules on the history of the enneagram, applications of the enneagram to popular culture, “number alike” team discussions, to personal “testimony.” When
Table 6.2: Mental Models Discipline Team Modules

<table>
<thead>
<tr>
<th>Class</th>
<th>Module</th>
<th>Title</th>
<th>Level of Integration</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>3</td>
<td>Enneagram History</td>
<td>Mental</td>
</tr>
<tr>
<td>3</td>
<td>3</td>
<td>E-greim and Movies</td>
<td>Mental</td>
</tr>
<tr>
<td>4</td>
<td>3</td>
<td>Where do we Go form Here</td>
<td>Mental</td>
</tr>
<tr>
<td>5</td>
<td>3</td>
<td>Going to a Restaurant</td>
<td>Mental</td>
</tr>
<tr>
<td>8</td>
<td>4</td>
<td>Last Year of Your Life</td>
<td>Emotional</td>
</tr>
<tr>
<td>9</td>
<td>5</td>
<td>Release and Affirmation</td>
<td>Emotional</td>
</tr>
</tbody>
</table>

extremely personal/intimate modules were presented, they took place as the last activity of the evening before the final debrief. The main emergent areas were change and community. All the quoted data in this section is based on the video taped observations.

The first two modules of the team used mainly the lecturette technique to introduce and discuss the history of the enneagram and give some examples of enneagram types (e-types) from popular culture. The team's third module was a pause to request direction from the community. After gathering directional statements, the team co-created three modules that required full community participation.

While introducing one of the assignments, a team member felt the tension of trying to become less structured. His struggle can be seen in the following quote.

Take some time watch the person and observe the person that you have chosen, and write this into a journal entry. It can be as long or short as you want and contain any information you want to write. I am leaving this completely open which is driving me nuts. just to let you know. I am very heavy “ J” and I like to have opening and closure. This is a new activity for me.

About a quarter of the community members discussed their confusion over choosing a single enneagram type. This was a problem since quite a number of the exercises
were based on the fact that people were separated into teams of same number members. The team participants decided which one was their type by working with people with similar types. While discussing type definitions from hand-outs and type similarity, participants related how they decided their e-gram type. These type-alike teams formed to dialogue and compare answers.

I've tried very hard to chose a category but I still have aspects outside. I am very goal and task oriented I was very frustrated when you said lets have fun. fun! I mean I saw absolutely nothing it wasn't like I saw it as lets have fun while we do this, this was something we had to do. Even though I viewed it this way but, I wish I could look at it that way but it goes against my grain. After last weeks exercise. I was in a team with him and I remember that we agreed on everything so I told him that whatever number he was so was I and today he says he's a three and I agree.

The enneagram discussions brought to the surface several issues that individuals had concerns with such as communication, intimacy, decision making and, their basic personality style. Many times they realized that in their e-groups everyone had similar issues. The following quotes illustrate some of the issues that were discussed:

I have an example. I’m a five. the thinker. don’t bother me. antisocial. in this description says that I am very perceptive this may not translate in how I relate to other people. In the exercise when I saw how everything worked I just jumped up and elbowed him. this does not help how I relate to there people but it solved the problem.

Impatience is mine. my wife will love to hear this. I will not go to a restaurant that will make me wait more than five minutes never. never. never. if there’s a line I leave. Last week I just wanted to jump right into the work. I didn’t want to waste time.

The mental models team co-created the largest amount of modules that required team work. The final exercise of release and affirmation was deemed extremely intimate since the release and affirmations were tailored to each individual enneagram
type. The following quotes form the debriefing illustrate what participants thought of the exercise:

I liked having the statement read to me. It shocked me.
I thought this is who I am, and I know I have to change. The release and affirmations are very powerful.

The mental models discipline sequence provided an opportunity to work on self-reflection and metacognition skills. The sequence began with a cluster of four mental/cognitive modules and then moved to a series of two emotionally focused modules.

6.1.5 Facilitation Discipline Team Sequence

The facilitation discipline team co-created six modules on weeks 2, 4, 5, 6, 7, and 9. The team began their sequence with an exploratory module on the meaning of the term facilitation. Afterwards, the team used a week to co-create their sequence. Their main goal became to help the community set a number of norms for safe-space through the use of the full value contract. Their second major sequence of modules centered around the personal needs assessment of facilitation skills. This team “taught facilitation by example.” All the quoted data in this section is based on the video taped observations.

The facilitation team clarified the community norms, helped create a cultural artifact, and conducted a needs assessment of the skills necessary to facilitation based on theory and research. The full value contract sequence established the rules and norms agreed upon by the community. (see appendix D)

This is not so much as rules but guidelines for the process and, the intent is for us to work together. We have a public agreement through the process of continuing dialogue and making this a contract for everybody.
<table>
<thead>
<tr>
<th>Class</th>
<th>Module</th>
<th>Title</th>
<th>Level of Integration</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>2</td>
<td>Defining facilitation</td>
<td>Mental</td>
</tr>
<tr>
<td>4</td>
<td>4</td>
<td>Full Value Contract part 1</td>
<td>Mental</td>
</tr>
<tr>
<td>5</td>
<td>5</td>
<td>Full Value Contract part 2</td>
<td>Mental</td>
</tr>
<tr>
<td>6</td>
<td>3</td>
<td>Needs Assessment part 1</td>
<td>Mental</td>
</tr>
<tr>
<td>7</td>
<td>3</td>
<td>Needs Assessment part 2</td>
<td>Mental</td>
</tr>
<tr>
<td>9</td>
<td>3</td>
<td>Building Community</td>
<td>Physical</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Our Community Plant</td>
<td></td>
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</tbody>
</table>

Table 6.3: Facilitation Discipline Team Modules

The needs assessment sequence was an auto-evaluation not shared with the community as a whole. Their final activity in the sequence was a community-wide exercise. The symbolic creation of an artifact of the culture — planting a plant. The major areas of focus for the discussions in the modules centered around values, beliefs and assumptions. This team created a physical object to represent and make explicit the culture. The team sequence moved to the co-creation of community. As the team facilitator expressed:

The frame for community is people interacting with one another. Change has to happen within a social setting. To create community we have to work on values. Values demand a conscious focus. Without knowing the values change can not happen. The community model is inclusive.

The facilitator continued enumerating the things necessary for community. These elements were called the seven Cs. These are,

1. Consciousness of self — Personal or individual values.
2. Congruence, honesty genuine.
3. Commitment—level of commitment with issues and other people.
5. Collaboration.

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6. Controversy with civility—things that upset the norms of the team cause controversy, which brings up development- if its done with civility its an improvement.

7. Citizenship—level of self responsibility connected to the community.

For the Facilitation team members change was the glue that gave meaning to the seven Cs. The team believed that change was the ultimate goal of the process of leadership and of their co-created sequence.

We wanted to present the class with a theory you could put into practice. We have not explicitly talked about what community is. But, according to the Fieldbook, community represents a change or exchange that's shared by all.

6.1.6 Team Learning Discipline Team Sequence

The team learning discipline team co-created four exercises during weeks 3, 6, 8 and 10. The main focus of the team's sequence was the development and awareness of communication skills, surfacing basic assumptions, culture and change. Usually this team presented as the middle module of the evening or the last module depending on how much time they needed. The longer the amount of time needed, the earlier in the evening they would do the module. All the quoted data in this section is based on the video taped observations.

Many of their modules focused on communication, verbal or non-verbal.

Since the team learning exercises focused mainly on communication skills, the safe-space topic emerged as an important part of several of the community discussions. For listening skills the facilitators blindfolded everyone and made participants communicate without the use of visual cues. Emergent themes in the discussion were participation, disclosure and trust when communicating. The concept of safe-space
was a topic that was discussed throughout the course. During the first team learning exercise issues regarding communication:

The blindfold shuts out everything except our words no other input and messages.

Without nonverbal communication, a lot of communication is shut up. People have to say um-hum to agree with a point since no one can see you nod.

How do you get people involved when you can’t see them?

Isn’t there an assumption that if someone isn’t speaking he/she is not involved.

We talked about the weather but it was one of he deepest conversations about the weather where people have been and lived.

From sharing, the conversation focused on how to deal with sensitive points and how to create a comfortable in a new environment. Those statements that are shared, but that make people uncomfortable. The following exchange took place when the community discussed so-called sensitive points. The main question was “how can you maintain a safe-space if some people don’t want to share?”

If I share and no one else does I feel naked, helpless. If they are not going to share they should say it form the get go.

Table 6.4: Team Learning Discipline Team Modules
We go into sensitive point frequently but it is like a muscle you have to exercise it and give it periods of rest and you have to allow some time for adjustment.

I can understand what she said I still don't agree with it but at first I wasn't even open to the possibility of the statement. I learned a lot, and I learned I should be careful because I may go against what I wanted to do, which was learn.

Political correctness is so ingrained in our minds. . . but I think we should put aside the worry that you have ulterior motives when you poignantly question me, that you have the motive to disgrace what I have to think, that you really are searching where you fit in my thoughts and where I fit in yours. It is not that I want to convert anyone but, I want to know. I want to learn, so maybe p.c. should be left in the hallway.

As an answer to the safe-space question the technique of Reflective Circle was introduced by a coach:

You only speak when you are moved to speak. The issue for the member is that if people don't share the lack of closure stays with the person days after the class. The other member required the freedom to pass. A way to respect people if you are in a circle is the next person cannot speak until I touch them. Write down your thoughts, share what you want

The play dough module was a fun communication exercise for the whole community. All the groups accomplished the task without any complaints and, the debrief was short. In terms of communication, though, different groups interpreted the instructions in different ways but the outcomes were the same.

For the last exercise in the sequence the team wanted to make clear that team learning should not be confused with team building. They explained the importance of icebreakers to team learning as a mean to learn a lot about other people. The team? recapped what the community had done in terms of team learning. Following is the team's recap of their module sequence:

The rules we set up were important to make people feel at ease and comfortable. The flow master was important for time management. Personal
mastery was very important in enhancing everyone's potential so that we could get more from the team learning. We as a team concentrated mainly in communication, teamwork and listening.

The final exercise in the sequence was a final debrief of what the team had accomplished. A collective reflection during the final class. Stories that emerged from the class took the shape of a testimony, revelations and realizations people had come to during their module sequence. The following story illustrated how a community member finally understood the meaning of team. It was an insight he had while in class.

After working in a soccer team for six years and always loosing. ... We finally had a good team that went 11-0 and we were hosting the championship. The night before the tournament all the team members were playing tag football and our best player broke his leg and we lost. That day we learned that in a team you can never get complacent. ... We also learned that we had no commitment to each other ... we broke our friend’s leg. I’ve learned that as a team we had no vision.

The team members shared their plans for the future which included keeping the rules for safe-space the next quarter, take a field trip and do team building activities. The team building day took place during the eight session of the spring quarter class. During this quarter the community members became comfortable with each other as they learned about each other and became more aware of different communication skills. They learned about themselves and how they were committed to each other, to co-create their learning experience.

Team learning exercises focused on communication skills. They concentrated on surfacing assumptions about communication. Their exercises exposed cultural assumptions and norm in terms of verbal and non-verbal communication. The team integrated and built up on the work of previous teams within the same session. The
team learning discipline team was one of the three who presented their plans and visions for CCLO II, although only one of the members remained in the team for the second quarter.

### 6.1.7 Shared Vision Discipline Team Sequence

The shared vision discipline team co-created a sequence of four modules on weeks 4.8, 9, and 10. They always were the last module of the evening before the final debrief. Most of this team’s work took place after the community had time to know each other. The main focus of their sequence of modules was disclosure of values and surfacing beliefs and assumptions. All the quoted data in this section is based on the video taped observations.

The shared vision discipline team embarked on a four module sequence on collective visioning. This team combined individual exercises with collective exercises in the same module. The sequence surfaced values of individual community members and which values they wanted for the community as a whole. The team clarified the difference between mission and vision which is illustrated in the following quote:

> Vision is the future we want to create, it's happening now, shows where we want to go. Mission is the purpose of the learning organization. You
will never get to the ultimate purpose of the organization, but you will achieve many visions.

The team's first exercise explored the concept of personal vision and values in a metaphoric form. The participants made drawings of their community house and how they could contribute to the building of a balanced community house. The exercise focused on examining and appreciating the elements of community as disclosed by the class participants.

The next exercise on the sequence linked personal vision to organizational vision. It was designed to help participants to align their personal purpose with the organization's purpose. This exercise helped prepare the community to create a share vision.

Three enneagram type alike groups worked on the exercise. For all groups creativity and trust was a salient feature of their idea of a learning organization. The first group envisioned an open organization dedicated to personal development focusing on the physical, mental and spiritual realm. The elements of their mission read:

Mission: Ability to move to a higher state of being. ... Fun. open, creative. character building. ... Give the understanding of how to become the person we want to be/deserve to be. Share a common goal and handle good and bad times as learning opportunities.

The second group envisioned a practical, purpose oriented learning organization where the main components would be creativity and trust. The elements of their mission read:

Mission: The learning lab is for practice and co-creation. A safe space for co-learning and “learning about learning.” ... Creative frontier. on the edge. with trust, respect and tolerance. Evolving learning organization process to adapt. Break the educational paradigm. ... Reflect on past activities. ... Linking activities to work towards the same purpose.
The third group focused on establishing relationships and creating community. Their focus was the flow of ideas, communication, and self-acceptance. Although the team had a long discussion, no closure was reached by the members of the group. For them, practicing how to be a learning organization was as important as completing the module as it was originally written. Of all the groups, this one had more than one person reporting their mission and process. The recap of the group’s process and attempt at developing a mission went as follows:

For the first 10 minutes we were on task and then we got sidetracked. We thought we were going down the list but we were talking about process and concepts ... we were a big team. We digressed. We discussed the conceptual part, there was no detail.

We were connecting. We were developing a learning organization ourselves. We were pushing the paradigm frontier, and we were enjoying our giddiness.

No one took notes we all though someone else was taking notes. It was really easy not to feel guilty that we were not taking notes. Since everyone was the same, we had flow. It was different to be in a team of sevens because the guilt was not there.

In the final module of their sequence the different groups developed their interim vision. The shared vision team sequence employed community discussions around the ideas of what is a shared vision. Differing ideas about learning space came to the forefront of the dialogue as weeks went by. Creating the vision for the class was a team effort that span several weeks.

The class generated four different vision statements that complemented each other. Three of the four groups used metaphors to describe the vision for the community. The first team used a lighthouse as their metaphor. This team’s vision focused on motivation. The group also included safety and encouragement as the main elements of their vision. Their vision read:
Hold each other up to a learning light, safety, hope and encouragement. A beacon to follow.

The second group used a meadow as their metaphor. This team’s vision focused on accountability. They included community support and health as the main elements of their vision. Their vision read:

We are committed to discovering our personality types and, selecting measurable goals for the quarter where we can apply these discoveries then, we can support others as they develop their healthiest characteristics.

The third team did not have a metaphor. The group decided to let their statement speak for their team. They focused on the concept of a high performance team. Their vision read:

A team to support members perceive challenges and interest in the pursuit of our commitment to the concept of team, with a fun loving manner and effort to increase individual and team productivity.

The fourth team used a plant as their metaphor. Their vision’s main focus was spiritual growth and questioning paradigms. Their vision was the only one that mentioned the spiritual dimension. The team used short sentences/ideas. Their vision read:

Future focused, learning into action, making a difference, that makes a difference, with a double loop learning to ourselves and others. A catalyst for more energy stretching the paradigm and deepening spiritual insight all with respect and accountability, discovery and learning light.

As the class tried to integrate all four visions into a coherent single vision, a community member came to the realization that the diversity of the class was well represented in all the visions.
It would be very limited to put it together since you lose something into the aggregation. . . . So that the vision becomes all of these items as shared vision. One of the strengths of this class was its diversity. So, let's keep the whole rather than wallowing it down.

The community decided that the vision would not be an aggregate of all four visions since they all showed the diversity of the class. In summary, all the visions integrated the concepts of an accountable, motivating, high performance team that values spiritual growth and inquiry.

The vision exercise became a register of the concepts that stuck in the participants mind during the class, since all the visions were written at the end of the quarter rather than at the beginning. The vision statements were dynamical constructs since they were not pre-given and emerged from the interaction in class. All the vision statements were creative and integrated the interdependence that groups felt.

6.1.8 Systems Thinking Discipline Team Module Sequence

The systems thinking discipline team co-created a sequence of four modules during weeks 3, 5, 9, and 10. After defining the term "systems thinking" the team facilitated a series of systems thinking techniques to surface and challenge assumptions. The emergent themes of the modules were change and culture. All the quoted data in this section is based on the video taped observations.

The second systems thinking module main aim was questioning beliefs. The systems thinking team stressed the use of different techniques throughout their sequence. Participants made connections between the tools and their application to each person's life. For their first module the facilitators presented a lecturette on system thinking. They co-created three learning activities for the module that went from
Table 6.6: Systems Thinking Discipline Team Modules

<table>
<thead>
<tr>
<th>Class</th>
<th>Module</th>
<th>Title</th>
<th>Level of Integration</th>
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<tbody>
<tr>
<td>3</td>
<td>5</td>
<td>Defining systems thinking</td>
<td>Mental</td>
</tr>
<tr>
<td>5</td>
<td>4</td>
<td>Storytelling and the five whys</td>
<td>Mental</td>
</tr>
<tr>
<td>9</td>
<td>2</td>
<td>Loops</td>
<td>Mental</td>
</tr>
<tr>
<td>10</td>
<td>2</td>
<td>Archetypes</td>
<td>Mental</td>
</tr>
</tbody>
</table>

physical representation of systems thinking, to a mental metaphorical representation to a practical representation. For their first exercise they physically demonstrated the concept the following quote was the explanation by the facilitator:

Stand up and form a circle around the table, lock arms, everyone go left, now right, in, and out. You are impacted by the people around you connectivity in a systems.

The systems thinking sequence continued with the introduction and practice of two techniques: storytelling and the five whys. The use of these tools had the unexpected consequence of revealing the basic cultural assumptions of the facilitators by their choice of topic. Although not expected, one fourth of the class could not use the tools since they did not understand one topic (a national US policy) or had a different view of the second topic (an international US policy). The following are excerpts from the different groups debriefing of the activity:

Group 1: Using the storytelling we came out with a course of action. But with the five whys we were more scattered.

Group 2: It was harder to do the story telling, the why method is easier to break down. I think the problem was that the Why was left brain linear. The story was right brain; an abstract way of conceptualizing the scenario.
Group 3: In the storytelling we gave contextual information, in the why we didn’t. In our group we had two international people who had a different mental model, so the original frame was challenged. And there was no contextual information for them to make a contribution to the discussion. We make a lot of assumptions depending our cultural grounding. The perspective was different, so we ended up defining what we talk about.

Group 4: Using the same topic we decided that the storytelling was what happened and the whys went into the motivation. The whys made us think about reason not just facts. We were moving to a place where we looked at who facilitated the conflict and who hindered or dampened the process : basically a who is doing what.

The group had a discussion on the concept of looping in systems thinking. The facilitators led a humorous discussion about how loops affected participants life. The following quotes demonstrate the general direction of the dialogue that ensued:

Student 1 I’ve been writing more since I got here (USA). Now I write every time I think about someone and. I am getting more mail.

Student 2 My cycle is my hair. You start with long hair. Then get a perm. It gets damaged so you get a haircut. And then you want long hair again!

After the loop discussion the facilitator introduced the Force Field Analysis tool. The facilitator read the steps and strategies to do a force field analysis. Then as homework they asked the class to journal the FFA for their learning contracts. These were to include strategies for “moving the equilibrium of the current state to desired state and describe the actions that must be taken to stabilize the system.”

In summary, the purpose of the systems thinking sequence of exercises was to uncover hidden systems underneath a problem by using different tools. The modules in the sequence were grounded in the mental and physical realm.
6.1.9 Icebreakers CCLO I

Icebreaker modules were created by individual members of the community for each one of the ten weeks. The icebreakers focused on team building and personal disclosure. Usually the themes were lighthearted, and the more intense icebreakers were done during the final weeks of the class after a space of trust had been established by the members of the community. Although the class was creating a learning organization, every time the members of the class used the term community to describe the environment, not the “organization.” All the quoted data in this section is based on the class’ documents.

The personal luggage exercise revealed some of the things community members valued. These areas can be clustered in three main groups. Personal relationships and spirituality with “friends, family and God.” Personal activities such as participating in sports. Personal characteristics such as “sense of humor, creativity, sense of wonder, curiosity, teaching, inquisitiveness, fun, hope, harmony and making a difference.”

6.1.10 Debrief Sequence CCLO I

As requested in the class debriefs the module’s sequence began focused on getting to know each other. Exercises focused on self-disclosure, personal affirmation, and team building. All the quoted data in this section is based on the class’ documents.

The debriefing period usually happened as a round robin five minute session at the end of each class. At the beginning of the quarter the class members were concerned with time keeping of allotted time for the different modules. The same concern
Table 6.7: Icebreaker Modules

was raised with starting and ending the modules on time. Therefore, the community created a revolving role—the flowmaster. Self-organization, emergence, and the structure of the class was dissipative. It changed, and teams adjusted their modules accordingly to fit the needs of the community. The feedback acquired at the end of each class through the debrief provided a vehicle for making adjustments to future presentations and activities.

The debriefs conveyed the concerns of the participants and illustrated which aspects of the class could be improved and which aspects were good as they were being preformed. The following examples from the class’ documentation illustrate some of the debriefs:

Being back, getting started, learning modules, group focus, team meetings, student learning focus our own learning objectives, continuing our learning networks, meeting agenda, size of class, the enneagram discussions, the topic selection process, good momentum, diversity.
The discussions, introduction of self exercise, getting to know others, new sense of openness, movement was good, development of a safe space in the classroom, creativity—opening up, a class that practices what it preaches.

The class flexibility, ease of response to improvements, open group response, interactive participation, focus on learning points, being here, coming here, learning about others.

Three hours without politics, flowmaster, sense of humor, food, increasing depth of dialog, full value contract, friendliness of group, participation.

Lots of laughter—We’re never without laughter, the best class so far. Feel a sense of community growing. Not speeding the exercises. Safe trying something that I had no idea how it was going to go. Group meetings. Copies of the community house. Thanks for the modules, the deep dialogue around the contract.

During the development of the class the improvement list began to get shorter but deeper. The first few weeks the class concerns were about time and direction of the exercises.

More planning time, more time for overall understanding, start at 6:00 on time, end at 9:30 sharp, more clarity in direction, icebreakers on getting to know each other, clearer guidelines, two small breaks.

More realistic agenda, end on time, did not get to elaborate on beliefs discussion, more time necessary for enneagram.

As the weeks went by the improvements began to take a more personal turn as community members asked for more coherence in the sequencing of exercises. The class wanted depth in the experience and more time to cognitively process the exercises.

Lack of personal involvement, felt left out, need more time, class went too fast, activities across the modules are disjointed and unrelated.

Inform people when exercises are to be shared with the group.

Need more paradigm shift exercises, starting on time, need more movement.
The final debrief acted as a summation of how members felt about the class and their experiences during the quarter. They encompass simple things from liking coming to the class to having a sense of community and belonging.

I keep coming to this class ... next quarter its not what we learn is what we do. the flexibility the down to earth knowing yourself. integrating scientific knowledge connect what I believe to practice.

Getting to know ourselves, see it so much easier when people have the willingness to do things. building of time.

Theorizing, as Maslow would say, we have the sense of belonging, realize our learning potential in our meaning making. Learning to be a learning organization. I feel a sense of adventure. community to know through dialogue and experimentation.

6.2 The Co-created Course, Case 2

As the story of co-creation continues, for a third of the students in CCLO II. it begins for the first time. This section contains the description of the primary curricular components and events of the second co-created course. I begin with general comments about the first class session and. an overview of the organizational framework for the course. Then I discuss the major events by reviewing the intent and the specific processes used by each discipline team. This includes some illustrations of the community members actions, reactions, comments and. dialogues to certain team's individual modules or the sequence altogether using data from the interviews. observations and class documents.

Once again, the narration is sequenced to tell the story of each discipline team and the activities that were created by individual community members but. not planned by any discipline team. These activities are the icebreakers. the class debrief and the learning contracts.
6.2.1 The First Morning—A New Beginning

During the first morning the main purpose of the class was explained by a number of community members that had planned the session during the last class session of the previous quarter. They established that the workshop participants in CCLO II were expected to engage in learning experiences to build personal mastery of strategic leadership, teaming, and learning organizations. The basic objectives of the class that follow were presented in the class syllabus hand out:

- To provide an understanding of strategic leadership in the public and third sector learning organizations.
- To build personal action and facilitation skills in selected practice and competency areas of leadership, teaming, and learning organization (and networks).
- To provide facilitation services to client learning organizations.

The syllabus also contained a number of outcomes for individuals in the team environment which were:

1. Understanding of and practice of the five disciplines for learning organizations.
2. Understanding and application of the principles and practices of facilitation.
3. Understanding and practice of the linkage between PERSONAL EFFECTIVENESS, EMPOWERED TEAMS, and the creation and leadership of LEARNING ORGANIZATION.

Many participants’ expectations coming into the class were that it would be a continuation of the first co-creating learning organization’s class. The first morning was introductory in nature and presented the general ideas of co-creating a learning organization. The organizational framework for the class included the:

- Conceptual framework
Besides informing participants as to the framework and expectations of the course, the first class session was designed to provide the participants experience with some of the pedagogical techniques and instructional modes of learning they were about to co-create. These techniques were presented by continuing community members who had developed the agenda during the previous quarter. The first class provided an introduction to the concepts of: lecturette, learning module, experiential activities, planning and debriefing of the modules and of the class session as a whole. New class participants became aware of the fact that in this class they were expected to engage in self-exploration. The morning was composed of a series of personal exercises to illustrate different types of learning experiences. The main focus of the morning was the reports from the CCLO I six discipline teams.

That morning the class participants divided themselves into new discipline teams. Each discipline team created a minimum of three exercises or modules. Some participants remained in a single team for the entirety of the quarter, some mixed and matched and participated as members of different teams. The themes that the teams dealt with within each discipline were: 1) change, 2) culture, and 3) community. Within these themes, they dealt with the areas of emotions, communication, paradigm shift, team learning and empowerment.

Since all the teams had members of the first co-creating class, the teams already knew the general direction of what they wanted to explore during the quarter. The
assigned readings from Senge et. al.(1994). Riso and Hudson (1996). Palmer (1995) and 4) Linden (1997). also provided some guidance and direction for the class. The learning contracts were due on the second week’s class session. and were distributed to the community on the third week’s class session.

The first morning was co-created by community members that had been part of the six discipline teams. therefore. it was in a way different from and similar to all the other nights. It was different in the fact that individual community members facilitated the entire morning. It was similar in the fact that it engaged the whole community in several activities. Class participants enjoyed the team stories. especially the one told by the member who shared she had eloped and had a baby. They also enjoyed the personal biographies. the honesty of the team. seeing old friends. that a member of the class got engaged and that last quarter’s international observer was back in the United States from his home in Korea. Members of the class suggested improvements for the presentations and, made some requests about the class environment for the next class session. The facilitators agreed to follow the community suggestions. Some of these requests were: 1)to make more coordinated packets and. 2) to re-setting the room temperature.

The amount of materials distributed and number of activities performed where not overwhelming for any of the community members. The class had a large amount of planning time to work in their discipline teams. Although. not all members of the class had taken the previous course CCLO I. the new members of the community had all taken the Strategic Leadership class in previous years. so everyone knew what to expect from the course. At the end of the class session. participants engaged in co-creating the agenda for the next class session.
6.2.2 CCLO II Learning Contracts

At the beginning of the quarter each student created a personal learning contract, which was distributed to all the members of the community. The Learning Contracts for CCLO II echoed the themes from the previous quarter. A new element in the contracts became the theme of dealing with emotions. The main topics that emerged from the learning contracts were communication skills, community building skills, and personal skills such as a need to work on self-understanding, self-esteem, emotional competence, self-awareness, and identity. The following quotes reflect a compilation of the community member's Learning Objectives in the CCLO II individual contracts:

1) Learn deeply; develop a personal learning experience that puts a "pause" in the skimming. 2) Replace the negative, doubtful inner voice. 3) Take time to listen and meditate on other’s thoughts. 4) Transcend reactionary feelings to find the core. 5) Experience a growth process and trust in sharing.

1) I will strive to become a better facilitator in the classes I teach and the classes I attend. 2) I will continue to learn more about my personality type and how it affects my daily life at work and at play. 3) I will continue to work on my intimacy with colleagues, friends, and my wife. 4) I will work on my largely pessimistic attitude (I like to call it realistic). 5) I am still working on my television watching (I am down to about 1.5 hours a day). 6) I want to investigate systems thinking as it relates to the other disciplines.

1) To become more comfortable with uncertainty. 2) To incorporate more fun into life. 3) Become a more balanced leader. 4) Become more present. 5) Become more open with others.

In the CCLO course sequence the learning contracts acted as a learning tool, as well as a programming tool, for community members. Some community members continued the work started during the previous quarter. Other community members began work on new areas such as: balancing emotions, trust, and communication.
<table>
<thead>
<tr>
<th>Class</th>
<th>Module</th>
<th>Title</th>
<th>Level of Integration</th>
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<tr>
<td>2</td>
<td>2</td>
<td>Toothpicks. Escher and Paradigms</td>
<td>Mental</td>
</tr>
<tr>
<td>3</td>
<td>2</td>
<td>Emotions</td>
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<td>5</td>
<td>3</td>
<td>Emotional Quotient</td>
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<tr>
<td>9</td>
<td>4</td>
<td>Know Thyself—Enneagram Of Love</td>
<td>Emotional</td>
</tr>
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Table 6.8: Personal Mastery—Mental Models Discipline Team

6.2.3 Personal Mastery /Mental Models Discipline Team Module Sequence

The personal mastery/mental models discipline team module sequence, combined the personal mastery and mental models disciplines. The team co-created four modules during classes 2, 3, 5, and 9. They focused on paradigms, emotions and relationships. The team provided tools to reframe and discuss personal experience. The emergent themes for this team were community and culture.

The personal mastery discipline team sequence, focused on working with emotions. Their sequence dealt with identifying emotions and emotional responses. Some of these emotions were anger, regret, guilt, how to handle anxiety, transforming anger into love and learning to trust.

Following are some vignettes of how some community members described and defined their emotions in class:

The whole thing is based on a lack of trust that the result is going to be OK. If you are going to feel anxious how are you going to deal with it. eventually you have to learn how to trust. you; can have all the mental preparation but still you don’t trust the outcome.

Emotions are a topic that teams tend not to talk about. What do we do with them? What happens then? I know most of the emotions that I
have that aren't productive and not good for my well-being, so what is it that we aim for? Then who will I be? What happens to you as a person? Who do you become when you have all these in perspective?

When discussing anger a community member had the insight of how to deal with anger and expressed it as follows:

There's a lot of anger in our bodies, we try to transform anger into the source love. When anger is stopped, you get resentful about the world. Anger is triggered here and now. It is a physical sensation. Each of this is a current present state of feeling and emotion. The anxiety state... Can you release your emotions, instead of putting them on hold?

The third exercise of the team's sequence dealt with the instrument form the Executive EQ (Cooper and Sawaf, 1996). All community members took the instrument and could discuss their finding with the community if they felt like doing it. All community participants that were in CCLO I had taken the instrument during the previous quarter although, it was not discussed with their community. This time around, participants could compare where they were in the emotional categories and become aware of changes. The EQ categories included: current environment, literacy, competencies, values and beliefs, outcomes. Emotional self-awareness, emotional expression and emotional awareness of others. In each of the categories there are four levels of proficiency: optimal, proficient, vulnerable and caution performance zone. Some of the class discussions centered around how much some community members scores had changed for the better, such as the following:

I've never been an optimist but my score changed a lot. Huge changes in just about every single category. Last time I had seven things in the caution category, this time I had one. Not discipline and get bored soon. We all did great on relationships and interpersonal connection.
Table 6.9: Mental Models—NLP Discipline Team Modules

<table>
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<th>Class</th>
<th>Module</th>
<th>Title</th>
<th>Level of Integration</th>
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<td>5</td>
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<td>NLP Introduction</td>
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<td>6</td>
<td>3</td>
<td>Representational Systems And Rapport</td>
<td>Physical</td>
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<td>6</td>
<td>4</td>
<td>Reframing</td>
<td>Emotional</td>
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<tr>
<td>7</td>
<td>3</td>
<td>Shifting Perspective, A Recipe For Choice</td>
<td>Emotional/Physical</td>
</tr>
<tr>
<td>7</td>
<td>4</td>
<td>Drama Of Control</td>
<td>Emotional</td>
</tr>
<tr>
<td>9</td>
<td>3</td>
<td>Circle Of Excellence</td>
<td>Physical/Emotional</td>
</tr>
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</table>

6.2.4 Mental Models /NLP Discipline Team Module Sequence

The mental models/NLP discipline team combined the discipline of mental models with neurolinguistic programming as their content area. The team co-created six modules during classes 5, 6, 7 and 9. On classes 6 and 7 different facilitators from the team presented additional modules, answering requests from the community. The modules ranged from the history and introduction of NLP, to identifying other people’s modalities to learning tools, to reframe personal experience. The emergent theme for this team was change, more specifically personal change.

The NLP discipline team focused on the impact of the body language and the importance of inter-relationships other than the spoken word. Their rapport exercise open the eyes of the participants to a world seldom explored by the participant groups. This exercise was enlightening to some participants and they expressed their desire to use some of the body matching techniques in their daily practice.
Some participants expressed discomfort with trying to match each other's body language. Being aware of their own communication behaviors and, improving communication's further progress, were many student's primary personal outcome. The following exchange took place among a pair of community members.

Student 1: She used her hands a lot. I could feel I was with her.
Student 2: All of his conversation was on the 'see' mode- he's very visual.
Student 1: Has anybody told you that you are intimidating?
Student 2: Yes, I am curious and I probe a lot.
Student 1: I was once told that nodding is a female trait, so I had a hard time pacing her.

Another exchange between a different pair of community members focused on personal awareness.

Student 3: I felt pacing was on a parallel path. I use my hands a lot and, it was strange when he mirrored me. Then he started leading, then we went back. He led me all over the world. I feel so manipulated, there is a tendency to mirror people anyway. and I never noticed how much I do follow other people's lead. This is great if you are interviewing someone, you can pick so much more that what they're saying.
Student 4:
I felt my partner in the pacing and leading exercise was sending calm signals my way, and I tried to be more calmed.

Since by mirroring the participant became calmer, she continued her story and asked if the facilitators would be able to help her with a work related situation.

Student 4: At work there is someone who is a tight bundle of nerves, every time we're together I stand up and walk out. I am not willing to invest time on them. I don't want to absorb their intensity but I want to bring them to the other side and have some positive energy. I felt my partner in the pacing and leading exercise was sending calm signals my way, and I tried to be more calmed.
Student 5: I have the same experience, I wish I could help people not make a mountain out of a molehill. I am not good at breaking away from negative energy. I don't want to give negative energy.
In these vignettes students were asking for tools to cope with different situations. The appropriate tool was discussed and practice in the module Drama of Control.

The next exercise in the NLP sequence was a demonstration in which only one person participated. The exercise was very emotionally draining and time consuming. It was led by one of the coaches a Master NLP Practitioner. After going through the exercise experience the participant, gave a debrief to the community of the three perceptual positions he took in the exercise. Following are the experiences related by the participant. About his experience with Self he said:

When I was in the Self position my heart started racing in the meeting. I felt uncomfortable. Emotionally I felt angered and embarrassed. I felt concerned and worried. Wondered if my resume was ready. Thought “I’m better that this.”

About his experience as the Other person he stated:

It was unpleasant and hard to be in that position. I felt egotistical and powerful.

About his experience as Observer he expressed:

It was embarrassing and difficult to watch the exchange.

After the participant had shared his experience with the community, following the debrief of the three perceptual positions the participant took in the exercise, the class began a dialogue with the participant and the facilitator.

An example of the exchange that developed follows:

The facilitator was asked “Why did you ask some odd questions between changing positions?” and replied:

When someone is experiencing depth of emotion and you want to move, you want a clean experience. Do a mind-jogger. mentally shift. asking anything outside the realm of the experience. The odd questions were used as a break. “It’s called a break state”.

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The group presentation concluded with the remark:

We invite people into change process because if one part of a system changes the whole world changes.

The Drama of Control module was a lecturette on how to take control of an experience. Community members practiced the responses on the hand outs but no one role played the exercise. The responses dealt with how to take emotional control of a situation and, not allowing other people to tell you what you are or are not experiencing. The following exchange explores how participants can use the techniques presented and practiced in the module.

Facilitator 2: What we can do is to call a time out and state something like: “When you are ready to speak to me as a human being, then we can talk.” The question is how do we catch ourselves in the moment, and deal with our emotions?

Facilitator 1: Time out. what is it going on there for you?

Facilitator 2: We’re surrounded by a lot of people who don’t know how to ask for help. One of the most powerful moves is: “How can I help you? How can we work together?”

Student 1: But what do you do when the person says: “I don’t need any help?”

Facilitator 2: Just answer. “I guess I’m not clear and I am feeling abused.”

Student 1: If they say “You’re imagining it?”

Facilitator 2: Don’t allow the other person to take control of your experience, keep saying over and over again, this is MY experience. And say it in a peaceful way. What is it that you want form this conversation? And wait for an answer.

A breakthrough was achieved as a participant realized how she could be empowered.

Something just clicked for me on the emotional stuff because, my tendency has always been to repress my feelings, repress my emotions and, the key to what you guys are saying, at least what I’m hearing, is that you’ve
got to understand your feelings and emotions in order to tell somebody
to stop. you are making me feel like I have no personal power. One of the
keys is for me to start recognizing what my emotions are.
It's really keeping ownership of our own experience.

The circle of excellence that followed, was a group-wide activity that calmed the
participants and created a sense of well being. The exercise became part of the
class after several students requested something to help them change and, cope with
their emotions. A thought provoking dialogue ensued regarding the intentionally and
purpose of the exercise.

6.2.5 Shared Vision/Team Learning Discipline Team Sequence

The shared vision/team learning discipline team combined the disciplines of shared
vision and team learning. The team co-created four modules during classes 2, 4, 5,
and 6. The team lead the community in the co-creation of a community vision.
Afterwards, the team concentrated their modules on practicing team learning and
reflection techniques to create community.

The first three modules of the sequence focused on discussing the need for a vision
including the pros and cons of having a vision. For some team members, visions were
either inspiring, a prison, or useless. For others, the actual process of the discussion of

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<th>Module</th>
<th>Title</th>
<th>Level of Integration</th>
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<td>2</td>
<td>3</td>
<td>What is a Vision</td>
<td>Mental</td>
</tr>
<tr>
<td>4</td>
<td>4</td>
<td>Inner/Outer Circle</td>
<td>Physical/Mental</td>
</tr>
<tr>
<td>5</td>
<td>5</td>
<td>Body Language</td>
<td>Physical</td>
</tr>
<tr>
<td>6</td>
<td>5</td>
<td>Service Learning</td>
<td>Mental</td>
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Table 6.10: Shared Vision—Team Learning Discipline Team Modules
a vision rather than the accomplishment of one was the important part of creating a vision. The vision discussion led by the team members during the first three modules focused on the need for flexibility, as well as on the need for ground rules.

The whole class discussion first centered around the features that community members wanted to achieve from the class. The questions that emerged were rhetorical in nature but provided a rich topic for discussion. Examples of the questions follow.

- We do not need to write a grandiose statement?
- I think that what is important is the process, rather than a list of accomplishments.
- How do we reconcile conflict?
- How do you clearly define safety so that we can agree?
- Is it the idea to come with a win-win process and outcomes?
- What ground rules are we gonna have to get where we want to get rather than the end result?
- Do we want to have the flexibility to change the vision statement?

Afterwards, the focus of the discussion shifted from the process to the concept of vision. The following exchange ensued during the Inner/outer circle exercise which provided the opportunity for a long discussion about vision. Following is an excerpt from the dialogue among class members:

- Do we need a vision statement or, is the vision implicit in the kind of class this is? Can we come up with a sentence or, do we come up with words like flexibility, safe space, respect, instead of trying to put those together in some kind of rhetoric? Can we just have a vision statement that just encompasses the principles?
- What is a vision statement if it's not a mirror of your values?
- I get a sense of movement from vision but, the principles are a description of us, of who we are.
We need to balance challenge and support people. And, the critical part of change is that both of these are integral to the experience. Challenge and support is an underlying assumption of helping people grow and change. I love that notion of balance helping us grow. It's about creating an environment, a culture, a climate, that is part of the process where this is going for each in our learning.

After a long discussion and several iterations of a vision, the final class vision was stated as follows:

We are a dynamic expression of personal and team growth, characterized in a balance of challenge and support based on shared values connecting these processes to our other life experiences.

The shared vision/team learning sequence continued with a module on the concept of service learning. A team facilitator explained that, "service learning is when you have and educational experience through service." Embedded in service learning was the concept of reflection. The module provided a series of guidelines for reflection which were used later by the community to discuss the systems thinking module sequence. The following quote illustrates the facilitator's justification of the importance of the study of reflection:

We need the opportunity to challenge what people are learning. We are going to set opportunities within the context of the class. We can use these reflection questions to talk about our shared vision . . . in the Fieldbook the mental models chapter talks about reflection to slow down the thinking process, to become more aware of how we form our mental models and our relationships with other people.

6.2.6 Systems Thinking/Mental Models Discipline Team Sequence

The systems thinking discipline team co-created a sequence of five modules during weeks 2, 3, 4, 5 and 9. The team engaged in an exercise to illustrate the concept of
systems thinking. Afterwards, the team embarked on a 5 module sequence which they nicknamed the Mystery Topic (MT) to challenge mental models and to teach a series of systems thinking techniques. The co-created MT sequence was the most controversial and discussed of all the sequences in the quarter. After the presentation of the first MT module, where the co-created MT was presented, none of the other MT modules in the sequence went as expected. The community expressed a number of negative emotions towards the module sequence and some members even disengaged from the community whenever the MT group was presenting. Members of other groups integrated several discussions and examples of the first day of the MT sequence into their modules.

A general illustration of different instances in which the MT was discussed follows although, not exactly within the sequence of the MT presentations, since other three groups added to the ongoing dialogue between module presentations. The following narration reveals the troubles and frustration felt by the community and the facilitators of the systems thinking group, when faced with a solution mandate included
in the MT scenario. The problem began when the scenario had constrains which are non-existent in the government setting.

The class members were extremely confused about the TM goals. The class also had difficulty understanding what were the facilitating team members role and the community role in the simulation. They were confused about the ground rules for the exercise, the objective of the module and the allotted time for discussing the topic. The discussion was very emotional and controversial. The community members could not distinguish between the role they played and their personal role. This conflict is shown in the following intervention:

Student 1: How was the solution chosen?
Facilitator: This came from the board.
Student 2: Is a top down decision making process, other stakeholders have not been involved?
Facilitator: NO.

As the anxiety level of the community members increased so did their anger. Everyone was so angry that the purpose of the module was lost. The activity did not have a satisfactory outcome for either the facilitators nor for the rest of the community. The module went overtime and another group ceded their agenda time.

The following comments were part of the debrief of the activity after the module was over and shows the tension that developed in the community as a result of their dissatisfaction with the MT sequence:

Student 1 We’ve achieved nothing!
Student 2 You are imposing your perceptions on other people, but I really don’t care about this decision.
Student 3 I don’t like the energy in this room. As soon as she said that. I though I am not going to try to draw her in. When people feel that kind of negativity we should let them pass.
Student 4: How are we going to trust each other if we have all these feelings going on and all people are not participating?

Student 5: We don’t know when the facilitators were facilitating or when they were part of the group?

Student 6: In this exercise we produced adversarial intent.

A week after the first MT module a member of the mental models group used the icebreaker to discuss the MT systems thinking module. The previous week activity had been in his mind throughout the week and, he wanted to find out what other people were thinking after they had time to cognitively process the activity. Some community members who liked the activity commented:

Student 1: I enjoyed the module, it made me think about myself and I thought about how I react to other people.

Student 2: Very interesting. Hard to see the difference of role-playing and reality. I chose to take a confrontational approach and I wanted to see if it would turn into a win-win situation.

Student 3: I thought it was great. Thanks for taking it to someplace else.

For a small minority of community members, the experience was something they were still thinking about and commented:

Student 4: Very interesting I am still thinking about it.

Student 5: It was multi-layered. I am learning about myself and I reflected about it.

Student 6: I’ll wait.

Student 7: The really sick part about it is that I look at it as everyday. I’ll wait and see.

A majority of the community members did not like the MT exercise. Their comments expressed a number of negative emotional and physical responses to the exercise. The following quotes illustrate the responses of community members who disliked the exercise:
Student 8: I was afraid. I need to absorb and process.

Student 9: Didn't like it I left the room, from a win-win it turned into a shouting match.

Student 10: I felt the rules kept changing and new information kept coming out.

Student 12: Interesting, how much I hate people that are confrontational. Reasonable minds can disagree.

Student 13: I dislike role modeling, the exercise is a challenge in itself.

Student 14: In ten minutes I was bored. I was very upset. I felt a lot of the hostility came from the fact that the facilitators kept interfering.

Student 15: A learning organization is all “ands” but the facilitators kept adding “buts.” Good example of urgency. Imposed a decision. created rules. assigned the roles. some tried to reconstitute the rule. the controlling people did not allow the rule to be addressed. win-win says we will assert with courage or own perspective. They said we are responsible. Any member can time-out and say: Did you really mean we? I don’t feel the we.

Student 16: There was too much contradiction. it was unacceptable to question the rules.

After the icebreaker, the systems thinking group presented the second part of their MT module sequence. After finishing the diagramming exercise, during the debrief, a community member expressed her thoughts about the previous week facilitation skill.

I was thinking back to facilitation. I thought it would have been really helpful when we were in the tracks of: Do we continue on? Finish this? We were just in the depth of chaos in terms of facilitation that might have been all a wonderful time. We could have asked. What is happening here? And break out where we were because it would have been fresh in our minds. I think now is too little bit later; it’s a little bit hard one week to remember. We lost a learning opportunity because there were so many wonderful opportunities last Saturday. I have already processed it. It’s too far back.

Later in the session, some time was leftover after the NLP team presented and once again the time was used to debrief the systems thinking MT module. By then.
the systems thinking facilitator was questioning their group’s selection of the topic and soliciting feedback from the community members as to what to do with the exercise. since they had planned a six module sequence on the same topic.

Facilitator Do you feel we are going anywhere?
Student 1: I don’t like to guess correct answers when in real life there are no right answers.
Facilitator: We need to reevaluate our approach. Make it personal.
Student 2: When we contribute to the discussion it gets put on the paper. And at one point someone said something and you said NO. That was shocking! . . . It’s the mental model. For a participant in the room to hear NO when they give input was new.

Finally, the systems thinking group realized that the discussions they were engaging in lead the community away from their intended outcomes. All the group members but one, who did not come to class that day, had agreed to stop the MT sequence. The following quote contains the entire statement that a representative from the MT group deliveres to the community members as they decided to discontinue their sequence:

We had a major meeting and we came to a major decision. We think we have gotten to a point where the group is stuck. We think it would be a waste of time to try to continue with the module. So we would like to relinquish our time to the community.

Although the systems thinking team gave up the topic, members from the shared vision/team learning group talked about the topic in terms of facilitation. Using the previous class as an example, they enumerated the things that the MT module had violated. Following are some examples of their comments:

We need to balance challenge and support- last time there was no support. That was an artificial challenge. So I really didn’t see a challenge.
During the discussion led by the shared vision discipline group, one of the systems thinking facilitators explained why the system thinking group had chosen the Mystery Topic. He disclosed that the situation was a real one and that it had happened to a member of the group in his work environment. On this day that group member was absent therefore, he wanted to establish the group’s purpose to the community which he stated as follows.

We wanted to bring personal experiences like today. I don’t think that anyone has brought such a large personal issue which is what the scenario brought and to see the dynamic of how that worked—it didn’t worked. it was something he had live through so maybe that’s why it was difficult to handle—it was the personal experience from someone’s life and they had wanted to help solve it. There was no hidden agenda.

The reply from the community after realizing that this was a true event, was to suggest another path for the exercise and the use of a different pedagogical technique. Some of their comments follow.

Student 1: I think it would have been a lot better if it had been a case study rather than a role play. People saw it as something that might happen rather than something that did happen. I didn’t catch that it was real. I was trying to put myself in the role. The vision was lost.

Student 2: I think our own response is an excellent learning opportunity of how we react and to reflect and build upon it.

Student 3: There was a lot of emotion. I wasn’t getting anything form the role playing. There was conflict... Focusing on the conflict would be really helpful on how to deal with conflict and move forward.

Student 4: Many times in this class we want to have a good time and sometimes having fun and learning do not agree.

Student 3: I think we agree because the facilitator could say: ‘This is not working’ and not be penalized.

Facilitator Now as a class we can move beyond this. Being stuck meant we were not learning, so now we focus on something else rather than the negative energy.
One of the members of the systems thinking group ended the discussion with his reflection of the community. He realized how differing mental models and assumptions could lead to unexpected results which can be an important lessons. His comments follow.

Every class is in a way a model of systems thinking. Systems thinking is a number of techniques to use the interrelatedness to the group's advantage. And, in the scenario we never got to that point and, we realized we were never going to get there. The reflection made me realize that this group has a systems thinking structure. It's been built up since the last quarter and, the real problem with the scenario is that it didn't match the groups' systems thinking. And there was a backlash because of the different dynamics. Two different structures of systems thinking that didn't match is a very important lesson. For me, the lesson was that if I wanted to be a change agent, I'll have to be prepared with the organization's structure and, with what you bring to the organizational setting.

The last day of class, two members of the systems thinking group recapped their MT module. The first facilitator gave a lecturette on game theory and, how it applied to the situation. The second facilitator led a class discussion about what had gone wrong. He had a number of questions and realizations he wanted to share with the class. There was a cordial exchange between the members of the community and, none of the negative emotions that had previously surfaced came into play. Some excerpts from the exchange are presented.

This is a private business situation and, there was hesitation from those of us who work in government. It's a framework that I just can't accept this because its not relevant to my world and that happens often times.

A second facilitator continued the final module by posing a number of questions to the community. By this time, the discipline group had realized that the sequence violated the community's mental model so they posed the following questions to seek closure with the topic. Following is the dialogue that ensued:
Facilitator:

Our co-created learning environment functions on certain principles. What was about the MT that did not follow? What principles did we violate that the class was trying to put in place?

The following quotes were the verbatim feedback from the community members which were presented in a round robin manner:

1. The win-lose thing. Your frame of mind.
2. No options when we are about options.
3. If a team member leaves the team fails (firing decision)
4. CCLO is designed as a non hierarchical organization the game was designed as a hierarchical organization.
5. Unlike workplace. No collective bargaining agreement. No union contracts. no set of rules. no hierarchy of authority.
6. Everybody got caught in the paradox of creating a solution when it was already specified.
7. Furthermore we changed the assumptions of the situation. the game. We will change the expectations as we evolve.
8. The use of the terms “We don't, can't do that.”
9. The title itself creates a wondering. If one of our core values is openness and communication How does that co-counter to the core value?
10. The decision created a tense cynical environment.

The feedback engendered by the community included a number of the full-value contract norms, that in the perception of the community members had been violated.

The last question from the facilitator was to request ideas of how to turn a similar situation into a co-creating situation. The community discussed how to use the informal network within their sphere of influence. A participant added that sharing information fosters mutual trust. One final comment was not to over react and “look at the situation as part of the long process of your career.”
Although, community members had made explicit connections to the workplace, no one had expressed how the MT sequence had affected their personal outlook on life. The systems thinking facilitator ended the class with a personal testimony of an intimate nature. He expressed how working on this module and all of the other modules during class had helped him change. He expressed this as follows.

I just took a new position that some people thought they deserved. I have an employee that is upset that I’m the manager. My initial reaction before this course would have been. So what I’m gonna drive you like cattle. It makes me a little more comfortable to go in knowing that we have the skills now. I wouldn’t have think about these things before and, that could have been a terrible head butting situation.

What this topic has shown me is an example of what we did with team learning and, what mental models can accomplish if I really come in with a positive attitude. It has helped me say, there is a way we can all win.

As controversial as the mystery topic sequence was it represents the largest amount of complexity in the class. The adaptability of the class was tested as the MT group decided not to present on their fourth day.

**6.2.7 Icebreaker Sequence CCLO II**

Icebreaker modules were created by individual members of the community for each one of the nine weeks. The icebreakers focused on team building and personal disclosure. Usually the themes were lighthearted and, the more intense icebreakers were during the final weeks of the class after a space of trust had been established by the members of the community.

One of the most memorable exercises was the Recipe for serendipity. Each community member got to share with the community how they wanted to spend the summer. Some of their comments follow.
<table>
<thead>
<tr>
<th>Class</th>
<th>Module</th>
<th>Title</th>
<th>Level of Integration</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1</td>
<td>Tell Me About You</td>
<td>Mental</td>
</tr>
<tr>
<td>2</td>
<td>1</td>
<td>Child And Siblings</td>
<td>Mental</td>
</tr>
<tr>
<td>3</td>
<td>1</td>
<td>Nails On A Stick</td>
<td>Physical</td>
</tr>
<tr>
<td>4</td>
<td>1</td>
<td>Mystery Topic Debrief</td>
<td>Mental</td>
</tr>
<tr>
<td>5</td>
<td>1</td>
<td>Lateral Thinking</td>
<td>Mental</td>
</tr>
<tr>
<td>6</td>
<td>1</td>
<td>Recipe For Summer Serendipity</td>
<td>Emotional</td>
</tr>
<tr>
<td>7</td>
<td>1</td>
<td>Questions In A Hat</td>
<td>Physical</td>
</tr>
<tr>
<td>9</td>
<td>1</td>
<td>Win As Much As You Can</td>
<td>Mental</td>
</tr>
</tbody>
</table>

Table 6.12: CCLO II Icebreakers

- No course work this summer.
- Read books.
- Listen to CD's not TV.
- Find a new job.
- Become an aunt.
- Go whitewater rafting.
- Get on a plane, and conquer my fear of flying.
- Fly a jet for the first time (at USAF pilot training).
- Go to the national Spam convention.
- Spend time with family.
- Move to suburbia, just bought a house.
- Celebrate grandma's 100th birthday.
- Take daughter to lake for the first time, she's 7 months old.
- Summer is too far away to think about. Quarter's not over yet.

6.2.8 Debrief Sequence CCLO II

The debriefing period usually happened as a round robin five minutes session at the end of each class. It changed and teams adjusted their modules to fit the needs of the community. The debriefs expressed aspects of the class that should be kept and,
aspects that could be improved. Some of the things that community members enjoyed and wanted to keep in the class were things such as the food, emotions modules, longer conversations and time for reflection according to the following comments.

Important lesson—respect each others personality. This is still a safe space. Discussion generated from the emotions module. The parking lot idea.

The food, the warm comfort zone, improved on prior subject and went more in depth. I like the new people in general, they add a very different dynamic than we had last quarter—it’s been interesting, Different energy.

Great idea for food, idea and execution. it was unique, introducing conversation about sensitive group process, reflecting on the vision. I like we had conflict last week and the comfortable space this week where we can talk about the conflict.

Liked the food, the deep discussion, the pace of the class, thanks to the coach for improvising exercises.

During the first few weeks the concerns of the community members, as expressed in the following comments, were about time and direction of the exercises. Halfway thought the course the improvement list began to disappear.

1. Replace the whistle with a chime.
2. Move planning to the beginning of the session rather than the end
3. Worry less about logistics. time.
4. Trust the process.
5. Don’t seek closure.
6. Don’t believe in the change is always painful I would like to
7. challenge that assumption and put it in the parking lot.
8. Recognizing people emotions and feelings be aware that when we feel uncomfortable and its our un-comfort and not theirs.
9. This did not help me I’m very upset have a headache. I am tense, they way that it was handle could have been in a different way. I felt I was being attacked.
<table>
<thead>
<tr>
<th>Class</th>
<th>Module</th>
<th>Title</th>
<th>Level of Integration</th>
</tr>
</thead>
<tbody>
<tr>
<td>8</td>
<td>1</td>
<td>Have You Ever</td>
<td>Physical</td>
</tr>
<tr>
<td>8</td>
<td>2</td>
<td>Introduction to the Day</td>
<td>Mental</td>
</tr>
<tr>
<td>8</td>
<td>3</td>
<td>Progressive Warm-Up</td>
<td>Physical</td>
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<tr>
<td>8</td>
<td>4</td>
<td>Lecturette</td>
<td>Mental</td>
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<tr>
<td>8</td>
<td>5</td>
<td>Totem Pole Shuffle</td>
<td>Physical</td>
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<tr>
<td>8</td>
<td>6</td>
<td>Trust Sequence</td>
<td>Physical</td>
</tr>
<tr>
<td>8</td>
<td>7</td>
<td>Team Lift</td>
<td>Physical</td>
</tr>
<tr>
<td>8</td>
<td>8</td>
<td>Production Problem</td>
<td>Physical</td>
</tr>
<tr>
<td>8</td>
<td>9</td>
<td>Energy and Cleansing</td>
<td>Spiritual</td>
</tr>
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</table>

Table 6.13: Outdoor Adventure Day

The debriefing sequence allowed participants to vent their concerns and to ask for adjustments to the class. It was an extremely important feature of the class since these modifications were usually taken into consideration by community members when co-creating their modules.

6.2.9 Outdoor Adventure Day Sequence

The Outdoor adventure day was facilitated by a community member who had previous planning experience as an outdoor educator and facilitator. The community members didn’t have any idea of what to expect during the day since no preset agenda was distributed.

During the outdoor adventure day the first series of exercises were physical and participatory in nature. These exercises set the tone for the adventure day since they involved a lot of movement.

Some comments from the totem pole discussion that emphasize the physical and participatory nature of the exercise follow:
Student 1: There was a lot of anxiety, for some people.

Student 2: As we figure it out then we sped it up and the chain experience helped facilitate the process.

Student 3: I was afraid to move because I was afraid of falling.

Student 4: For the record I never got used to it. You weren't groped that much. I never got used to Ted rubbing against me.

Student 5: We developed communication techniques really quickly as the exercise went on. people had more patience. At the beginning only two people were trying to balance each other. at the end about five people were trying to hold the person crossing over. Someone hummed happy birthday to signal birthday and not enneagram, and someone hummed jingle bells for the month of December.

Student 6: The group created the safety net to support themselves. In this exercise we moved closer together to get a safe space.

Some comments attesting to the physical and participatory nature of the exercise

Trust sequence-Falling and Levitation follow.

It's harder when you try to fall to the front than to the back. There is more trust when you close your eyes. I liked that we had to pair with someone we did not have a close relationship with. I am always afraid if the people are not the same size. Learning to trust in others creates freedom. It's harder when you try to fall to the front than to the back.

The production problem presented a physical challenged that surfaced participants mental models and emotions when working with groups.

The following comment about the Problem solving exercise present how students dialogued about problem solving:

Facilitator: You had all the resources that you needed and what were the insights by virtue of what you used you didn't use. how did you interpret this activity?

Student 1: It was just like the beginning of the quarter. last quarter. the Mips and Luts exercise, we had extra stuff.

Student 2: Often the solution to most problems is the simplest thing and we always look for the hardest way
As a part of the debrief different mental models surfaced as exemplified in the following exchange:

Facilitator: Whose ideas were not listened to?
Student 1: Most of the time people that get frustrated tune out.
Student 2: Most people don’t see the whole picture. we did ... Everyone else was saying lets take it one step at a time and they were ignoring us until they got to what we did. We saw the whole thing.
Student 3: That was bad. a little chaos is ok. but if I’m not listened to I get aloof and tune out. It’s not something I am pleased with. Sometimes I get so frustrated and when other people are intense about their idea my way to handle it is not to get involved. So I think I should actively try to stay in.
Student 2: For us their ideas didn’t make sense so we rejected them out but at the end we used them.
Student 4: You were using linear thought. I don’t have patience for the linear process.
Student 2: Why are we talking about step 1 if we haven’t even gotten there. I had an idea of how to do it and after that I didn’t listen to anything else I immediately started doing what I wanted to do.
Student 1: I like to plan and then do it. whereas other people like to just jump right in and then figure out as we go along.
Student 2: When people are leaders they tend to act first instead of getting consensus. In most cases you can listen to people During the exercise we refused to shift our paradigm.
Student 1: If everyone would have been involved then no one would have been pissed off. Half of us checked out. If this were real life. we would have an extremely dysfunctional team.
Student 2: I always have a personal struggle. so many times I get involved in group discussion about how to do something and the activity becomes the discussion not the doing. And I have a fear, an absolute fear that no one is going to take charge and actually start to do. It’s always gonna stay in the talk stage. We’re going to spend 90 percent of the energy on talk and 10 percent on do. I get sick of . I’m not gonna stand back and when things fall apart I’m gonna say I told you so.

The outdoor adventure sequence integrated the physical, mental, emotional and spiritual domains. The day’s exercises required a high level of trust from community
members. During this day participants felt safe in the community space. Safe to try new behaviors and practice new ways of being which encompassed the objectives of the learning organization.
CHAPTER 7

THEORY OF ACTION, A THEORY OF CO-CREATION

In this chapter the research study is summarized. The research questions and the research methodology are revisited. Learning outcomes are supplied. Findings are provided and, emergent themes discussed. The chapter ends with implications of the research for pedagogical practice and leadership. Recommendations for future research are presented.

7.1 Summary of the Research

This is a study about practice and innovation, a curricular innovation. The co-creation of a learning organization. A study of an organizational transformation that traces the development of a learning organization. The main goal of this study was to describe, understand, and interpret how graduate students at a large mid-western public university engage in the co-creation of a learning organization and establish a theory-of-action of this organizational change.

In this study the researcher described change-in-practice in the co-creation of a learning organization by a community of learners: established the implementation, processes, and development of an educational innovation in higher education, and develop a theory of action of what occurred in this holistic program model. The
definition of the objective reality of this innovation will move educators and educational institutions engaged in change one step closer to understanding the nature of educational change in academia.

In addition, the study addresses a new form of instructional design, a co-created emergent course design. The study also contributes to the existing bodies of knowledge in multiple areas, such as: educational innovation, educational change, organizational change and development, self-directed learning, instructional and curriculum design in graduate education and leadership development.

The study focused on the procedures, instructional strategies, resources and the experiential learning activities that were created and used by the learning community. In other words, how the class was designed by the learners. A study at the graduate level of an educational change in an institution of higher education consisting on using a new paradigm that addresses the need for student participation in the decision making process for determining what (content and materials) and how (procedure) of educational practice.

The main expectation of the CCLO course sequence relied upon the active class participation in the co-creation of a high-performance learning organization. In this educational experience, the needed interplay between the parts and the whole in the co-creating of a learning organization is similar to the interplay between the parts and the whole that has been emphasized in studies of complex, self-organizing systems. According to Fullan (1995), the purpose of research using the complexity theory perspective is to indicate how to establish classroom conditions within which spontaneous self-organization can occur to facilitate the production of emergent outcomes.
Therefore, in this research we used complexity theory to visualize and analyze the co-creation of the learning organization.

The study of this curricular innovation as a whole had a dual focus. In studying the policy laboratory as a learning organization, the researcher created a focus on learning which included: individual, team and, class learning. And, in studying co-creation, the researcher focused on teaching. A study of co-creation is a study about teaching. Teaching conducted by a number of participants that were not teachers by training or profession.

7.1.1 The Context

The research study examined two case studies, both of them part of a curricular continuum. CCLO I and CCLO II are two individual, complementary courses in which students could enroll either in the sequence or just in a single course. Each CCLO course was a 5 credit course, sequenced in two consecutive quarters in the School of Public Policy and Management (PPM) at the Ohio State University. The class met for 3 consecutive hours once a week for 10 weeks. During the 1998 iteration of this policy laboratory sequence, two thirds of the class participants enrolled in the whole sequence. For these individuals the CCLO learning experience lasted nineteen weeks.

The CCLOI class was composed of a coaching team of 4 members which included the professor of record. 17 enrolled students and 2 visiting scholars. The CCLO II policy lab consisted of the same 4 member coaching team, 15 enrolled students. 6 of which had not participated in CCLO I. The new students that joined the class for CCLO II was the same amount of students that did not continue CCLO I. The CCLO
course sequence dealt with the surfacing and examining of individual and collective
basic assumptions and presuppositions. These assumptions are unconscious patterns
and theories-in-use that individuals use to act upon in life. The CCLO course
sequence attempts to examine participants' beliefs about leadership, teaching and
learning.

All classes integrated humor and fun into the session experience while exploring
the different areas of leadership practice. Three major themes emerged in the course
sequence through the processes of inquiry, analysis, and interpretation. These were:
change, personal and professional: community, how to create one; and culture, how
to foster an open and trustful learning, living and working environment. In both
CCLO courses the theme of change emerged both as process and subject. Within
the theme of change, two sub-themes emerged: personal change as a content area
(learning discipline) and change in practice as pedagogical methodology.

The researcher observed the CCLO sequence as a student-based complex adaptive
learning community where students are coupled to teachers, to other students and
to the "real" world of practice. CCLO had an interdisciplinary, innovative, integrative
and interactive focus. In CCLO participants developed teaching techniques that
incorporated complex systems ideas. This study is an effort to document an example
of a multidisciplinary approach with complex systems elements which have been tried
and succeeded in co-creating a learning organization.

The CCLO sequence focused in the process of creating and transforming experi-
ences into knowledge, attitudes, skills and values. Class readings, their discussion and
application were the active study of metatheory, knowledge about practice. Community members sought with their discipline teammates to enhance their knowledge of metatheory and convert it into learning experiences for the community.

Co-creating involved the study of both theory and metatheory. Theoretical study required knowledge of practice. Creating a learning organization the participants acquired a first hand experience with practice. This study presents an expansion to the theoretical and operational foundation for teaching and leadership practice that gives a new perspective in which to examine teaching and learning.

7.1.2 Data Collection

The study used a naturalistic approach to inquiry which describes phenomena and investigate the nature of social experience holistically in its natural setting. The research implemented a multiple case, embedded case study design with multiple levels and units of analysis. Data collection methods included participant observation, informal interviews and document analysis.

Data collection took place from January 1998 to June 1998, encompassing a period of two academic quarters. The data collection process for this research project involved the collection of observations of participant's interactions, the collection of documents and their subsequent analysis, conducting informal interviews of most participants and, personal involvement in some the participants out of class social activities. All the class sessions were videotaped and audio taped. The 36 videotapes were transcribed and reviewed several times. The data was analyzed using Atlas.ti The Knowledge Workbench software.
Unobtrusive measures were used to gather data regarding age, gender, ethnicity, and nationality information. Participant observation revealed the participants' background, their educational level and goals, personal information such as the place where they had been born, schooled, and their previous and current jobs.

The interviews collected a great deal of information in addition to the information collected by the field observations and documents. Interviews were conducted with students before and after each class session. Coaches were interviewed periodically from September 1997 to June 1998.

7.1.3 The Researcher

In the summer of 1993, I took an experimental course cross-scheduled by the College of Education's School of Policy and Leadership and the School of Public Policy and Management. In this course I met Dr. Backoff, the teacher. I was very impressed and extremely intrigued, to say the least, by his teaching techniques.

As a doctoral student in education, I was very interested in observing Dr. Backoff's teaching technique in his leadership development class. For three years I tried to enroll in CCLO. Three years had gone by since I first had the experimental summer course when in 1996 at last I enrolled in the CCLO class with Dr. Backoff. At this point, I was not imagining that the journey would lead to this research study.

After taking the class, I became part of Dr. Backoff's coaching team. After two years, I decided to pursue my dissertation research on the CCLO class sequence. In this journey, I realized that what I liked about the CCLO course sequence was the fact that the pedagogical practice was different and that by researching it, I could shed some insight into this new form of graduate education. Since the CCLO course
was about learning organizations. I first sought to describe what is the process of creating a learning organization.

As I interacted with many of the students and alumni of the PPM program, I realized that most of the students in this class were going to be or were in leadership positions in city, state, and federal government. As my conversations with students and alumni continued, I discovered that many of them wanted to apply the principles of the CCLO class to their workplace.

I had been keeping field notes and reflections about the class for more than two years from three different perspectives: as a student, as a coach, and as an educational researcher. During the analysis and synthesis of this research, I used the information from these notes.

I have always been fascinated by good educational practice. It all started in 1986 with professor Helia Murillo at the University of Puerto Rico. She was my first teacher education professor, and she taught me how to examine practice. Since then, I have always loved to observe different teaching methodologies.

The title of this study *Master Class* comes from my musical background. In high school I played the clarinet. My music teacher at the Puerto Rico Music Conservatory, Kathleen Jones, taught me that master teachers give master classes. In her instruction, Kathy always said “as Marcellus (her teacher) would say . . . .” The first time I saw a master class at a clarinet conference in Ohio with Robert Marcellus, he said to his students “as Bonade (his teacher) used to say . . . .” When I became a clarinet teacher in Puerto Rico, I said to my students “as Kathy (my teacher) says . . . .” Then I realized that my students were hearing verbatim the words of Jones, that were the
words of Marcellus, who spoke the words of Bonade, the father of the modern clarinet. The whole experience for me was powerful and it exemplifies the meaning of practice.

7.1.4 Research Questions Revisited

This research study explored the question:

1. What is the theory of action of an educational change consisting of the design, co-creation and development of a learning organization by a community of learners?

Two secondary questions explored:

1. What educational strategies and resources participants used to co-create the learning organization? and.

2. What was the emergent design of the co-created course?

The answer to the questions contributed to a more complete understanding of the co-creation of a learning organization. All the research questions led to a wealth of descriptive data.

In this study, through the processes of inquiry, analysis and interpretation, the researcher established the theory of action of a the co-created learning organization by a community of learners in the CCLO sequence as evidenced in the descriptive data presented in chapters 4, and 5 and, analyzed in chapter 6. The theory of action was found by the researcher in the community norms, the strategies used and, the assumptions held by the learning community, which are all evident in these three chapters.
The courses' espoused theory was found by the researcher in the official documents of the class such as the syllabus and the multitude of handouts. The official statements presented in this array of documentation established for the researcher what the participants or change agents wanted to accomplish as the result of the implementation of the change in pedagogical practice.

The researcher presents the CCLO sequence theory-in-use in the co-created materials and activities done by the participants during the whole educational experience. In chapters 4 and 5, an account of the day to day activities co-created by the different discipline teams was provided by the researcher.

The secondary research questions addressed the strategies and resources co-created for the course and the emergent design of the CCLO course sequence as a whole. The researcher found that the teams used a variety of experiential activities, lecturettes and discussions as their primary mode of instruction. It was also found that during the CCLO sequence several discipline teams focused specifically on teaching and practicing specific skills among these: relaxation skills, communication skills, thinking skills, neurolinguistic programming skills and team building skills. The researcher established that some teams utilized the assigned books to plan their modules but most participants supplemented the assigned books with other resources. Other team members also used strategies learnt outside the academic setting, in nonformal education, the military and industry.

Through the use of interviews the researcher realized that some themes and issues regarding the class were common among participants. The use of additional interviews and observations during the CCLO sequence allowed the researcher and the
participants in this study to co-explore some issues and themes identified in previous interviews. The researcher considered these themes were important because they were evident across the CCLO sequence. In particular, the students really enjoyed the whole concept of co-creating their own learning experience. Furthermore, all the students thought the creation of a learning community enhanced their educational experience.

In terms of the exercises the researcher found that all the participants remarked about the usefulness of the personal mastery exercises in the first case and the NLP exercises in the second case. It was also found that personal change was one of the topics that all groups worked into their co-created sequences. Although the CCLO I learning community emphasized personal development, while the CCLO II learning community emphasized emotional development. And that the learning community of the first case discussed primarily personal beliefs and values and the second case focused on emotions, their expression and control.

From the interviews the researcher established that some exercises from the first case influenced and evolved into the second case. It was also found that the most powerful sequence of exercises during the first case were the breathing and meditation exercises. And that the energy engendered by this group's activities flowed into the second case as a before class yoga group. The exploration of mental models and personality type from CCLO I evolved into the NLP exploration during CCLO II.

The researcher found that the participants in class engaged in new ways of behavior with the goal of helping other participants develop a physical, emotional and mental awareness of themselves. Learners also learnt how groups function, how groups
interact with one another and the consequences of different group actions and pro-
cesses.

From the CCLO sequence as a whole the researcher identified three major themes
that emerged: 1) change, personal and professional; 2) community, how to create
one; and, 3) culture, how to foster an open and trustful learning, living and, working
environment. These themes will be discussed in the next three sections.

7.2 Emergent Theme One—Change

One of the emergent themes identified by the researcher from the CCLO sequence
was change. In this section change in practice which included, personal and profes-
sional change and, change as a topic in the CCLO sequence are discussed.

7.2.1 Change in Practice

This study described the relationships of the process of change in practice in
academia. Change is not a step-like process, it is a continuum of complex events
with a generally definable scope and focus. Educational change can be clarified by
identifying and describing three main dimensions in the implementation of an educa-
tional innovation: 1) the use of new or revise materials, 2) the use of new teaching
approaches and, 3) the alteration of beliefs (Fullan & Stiegelbauer, 1993). The re-
searcher found the three relationships of the process of change in practice in the
co-creation of the learning organization.

It was found in this research that the theme of educational change had both
theoretical density and groundedness. The data analysis confirmed that the change
in teaching practice in the co-creation of the learning organization had two major
relationship clusters. The conceptual map of change in practice Figure 7.1 illustrates
the main relationships between the emergent concepts and the emergent theme of change. One of the clusters affecting change in practice dealt with the strategies for change in terms of materials, skills and, techniques which were consciously acquired and discussed within the context of the CCLO course. The other cluster that directly affected change in practice was beliefs. The study and disclosure of participants' beliefs about practice and the topics under study, were both part of and a property of the creation of a safe space for risk-taking and innovation.

The course sequence provided a safe environment that facilitated change. In the classroom environment errors were viewed as learning opportunities, since successful performance in class included reflection on actions taken, and strategies to enhance or improve personal performance. In this classroom environment having room for

Figure 7.1: Conceptual Map of Change in Practice
improvement was always a bonus and. unexpected outcomes of exercises were not viewed as flaws in strategic planning but as learning opportunities. The epistemology of the course gave the students the freedom to experiment, succeed and fail. Failure encompassed personal failure or not accomplishing the group's objectives. Apparent failure did not have a causal effect in the students workplace persona. since in this learning environment participants were not afraid to lose face or appear incompetent. These conditions facilitated innovation. Innovations occurred when students altered their dominant schema and the alteration was beneficial to the students performance.

In this research the components of educational change in teaching practice were explored at the classroom organizational level in the context of a graduate program. The researcher found that the course dealt with the use of new educational methods, materials and. most of all the exploration of new belief structures, as mental models about the practice of teaching and learning. The basis for this educational experience was the co-creation. In this setting co-creating was an educational experience that re-defined and reshaped the teacher-student relationship. Co-creating changed the burden of the responsibility for the educational experience from the professor to the student community.

The use of co-creation as a change in teaching practice, dwells into the real meaning of knowledge creation as contrasted to knowledge delivery. Co-creation brought to the forefront the importance of knowledge of practice (theory) rather than knowledge about practice (metatheory) by incorporating practical knowledge (how). with factual knowledge (that) and. knowledge of (people and places). Co-creation empowered the student to explore those areas of knowledge they deemed important at their developmental stage in life.
The researcher found that change was ever present as the course developed during a period of five years, in which the meaning and practice of co-creating evolved. During the first CCLO course in 1994, the term co-creating meant that the coaching team co-created the experience for the class with a day of participants co-creating presentations for the learning organization. Five years latter, the term co-creating evolved to mean that the class participants, including the active participation of the coaching team, co-created the whole learning experience. This development was based on the premise that the:

1. the student participated completely in the learning process and had control over its nature and direction.

2. the course content was primarily based upon practical, social, personal or research problems.

3. self-evaluation was the principal method of assessing progress and success.

4. the course emphasized the importance of learning to learn and an openness to change.

7.2.2 Change as Topic

In the CCLO sequence change as a topic was the study of change by the community as a subject area. From the data analysis the researcher found that change as a topic in the CCLO sequence was related with six emergent clusters. The study of change as a topic is associated with the study of self-awareness, emotions, beliefs, communication, vision and learning. The conceptual map of change as a topic
Figure 7.2 illustrate the main relationships between the emergent concepts and the emergent theme of change.

The researcher found that in the CCLO sequence the emergent theme of change as a topic had a causal relationship on learning, since it both informed and helped create learning. It was also found that the study of belief, which in turn includes the dialogue and awareness of the participants' spiritual beliefs—seldom discussed in secular educational environments, was part of the emergent theme change as a topic in the CCLO sequence. If leadership is seen as the fullest expression of your-self, in which leaders practice leadership from within, the spiritual aspect of leadership cannot be ignored. This was the case in the CCLO sequence. In this class spirituality was recognized, expressed and explored as part of many participants’ personal
development. In the data analysis change as a topic was associated with the emotions cluster and the self-awareness cluster. In the CCLO sequence the self-awareness cluster dealt with emotions, spirituality and personality type. Self-awareness came from all the modules as the community explored new dimensions of leadership.

In the CCLO sequence, the focus on change was mainly on personal change. In terms of leadership practice it involved the domain of how to practice leadership and create change by practicing self-mastery. The context of the class provided a space for the study of personal change as a major emergent component of the course. In the practice of leadership that comes from within, two sub-themes emerged: personal communication and emotions.

In the course sequence, the focus of change as a subject explored and created exercises around the topics of emotions and communications. Centering around the emotions cluster were intimacy, balance, self awareness and personality type.

7.2.3 Summary of Findings

1. The class experience was student-centered, had a student-created focus and an experiential-based learning that incorporated pedagogical techniques from the fields of training, education, management and administration.

2. In the co-creation of the course sequence, the learning experience focused on the importance of theory of practice and theory about practice.

3. The class participants became aware of the importance of reflection to improve and inform leadership practice.
4. Students made connections between leadership development and self-development and expanded their conceptions of leadership.

5. Co-creating was an adequate alternative to traditional educational practice in the field of leadership development.

6. The responsibility of the curriculum creation was in the hands of the class participants.

7. The co-creating process required extended “together” time and space.

8. Students' beliefs about the classroom setting and teaching practice were changed and enhanced.

9. Students were capable of creating adequate materials and activities to co-create the learning experience.

10. Students attributed changes they experienced to various of the course concepts, interactions and exercises.

11. Student experiences confirmed much of what is known about personal change processes: specifically, the roles of emotions, chaos or dis-equilibrium.

12. Educational change was accomplished in a self-organized student-created environment.

13. The concept of safe-space and its definition was necessary to foster educational change.

14. The study of personal beliefs was an important topic in the study of leadership and change.
15. The study of personal change was an important part of the academic experience.

16. Organizational development and culture change were closely linked to the development of change in personal schema.

7.2.4 Learning Outcomes

1. Student participants in the co-creation of the course sequence focused on the importance of theory of practice and metatheory—theory about practice.

2. Students were free to co-create the collective course of study.

3. Students changed their basic assumptions about classroom setting conventions and teaching practice.

4. Student teams co-created materials and activities adequate to the co-creating learning experience.

5. Students co-created a learning environment by creating safe space norms.


7. Students dealt with emotions, self-awareness and spirituality as important components of self-development and leadership, a holistic learning experience.

7.3 Emergent Theme Two—Culture

Another emergent theme identified by the researcher from the data analysis of the CCLO sequence was culture. From the data analysis the researcher found that culture in the CCLO sequence was related with five emergent clusters: belief that is a property of culture, safe space and personal development which had a casual
relationship on culture and vision and communication which are part of culture. Also, there was a causal relationship between safe space and communication. the safer the space the better the communication.

The conceptual map of culture Figure 7.3 illustrates the main relationships between the emergent concepts and the emergent theme of culture.

In the co-created learning communities of the CCLO sequence a culture was created. In both communities, the basic level of culture was created and transmitted by the creation of artifacts. In both learning communities a large quantity of artifacts were created which included: written documents, a personal journal, drawings,
physical representations of the class (the plant) and food availability for class participants. A variety of the artifacts produced by the learning community of the first class sequence transmitted their culture to the learning community of the second class.

In the CCLO sequence the second level of culture, that of values, was found by the researcher in both learning communities documentation and when they surfaced during many class discussions. The CCLO learning community values were stated in the full value contract and in the class mission statement. The full value agreement is presented in Appendix D. The researcher found that the communities revealed the number of values and assumptions that community members shared. Realized that some of the values were contradictory and, that all were expressed as rules.

The researcher found that in the CCLO sequence many of the class values showed a movement from traditional American values to more global values. Most American values have been broadly generalized by Stewart (1990) to describe American mainstream cultural values. According to Stewart (1990) the traditional American cultural values are: 1) Personal control over environment. 2) Change—inevitable and desirable. 3) Time and its control. 4) Equality. 5) Individualism. 6) Competition. 7) Future orientation. 8) Action orientation. 9) Pragmatic. 10) Materialism. 11) Planning and organization. 12) Serious and intense and. 13) Celebration of effort.

Stewart (1990) compared the American values with the global cultural values which are: 1) Fate. 2) Tradition. 3) Human interaction. 4) Hierarchy. 5) Interdependence. 6) Cooperation. 7) Past-orientation. 8) Being-orientation. 9) Feeling-orientation. 10) Spiritualism. 11) Improvisation. 12) Relaxed and. 13) Celebration of life. Cultural patterns reflect a general consistency in any given time although individual manifestation may vary. The different behaviors of a people or a culture make
sense only when seen through the basic beliefs, assumptions and values of the particu-
lar group. American view their values as positive and are not aware that people in
many countries view these same values as negative or undesirable.

The researcher found that the CCLO course sequence participants encouraged
the “traditional” American societal value of equality as the cornerstone of the class
interaction. But, for seven of the twelve other values the community found a way to
allow flow in the direction of global perspective or reached a happy medium between
the traditional American cultural values and global cultural values.

Both CCLO sequence communities consciously worked on their values in the areas
of: 1) personal control over the environment (mission, vision). 2) change as desirable
(topic and pedagogy). 3) time and its control (flowmaster). 4) equality (community
rather than class). 5) future orientation (vision). 6) action orientation (theory into
practice). 7) pragmatic (practice) and. 8) planning and organization (agendas). Also,
they worked in modifying these values. moving in the direction of the discussion
and integration of a global cultural perspective in terms of their values in the areas
of: 1) human interaction. 2) interdependence. 3) cooperation. 4) past-orientation. 5)
being-orientation. 6) feeling-orientation. 7) spiritualism. 8) improvisation. 9) relaxed
attitude (adaptive) and. 10) celebration of life.

In the CCLO sequence community the researcher found the third level of culture in
both learning communities. that is. the level of basic assumptions. Basic assumptions
were examined in both classes when the CCLO participants discussed and explored
their deeply held beliefs, values, and emotions. Basic assumptions include perceptions
(interpretations of cognitions) and values and. feelings (affects) that are likely being
dropped out of awareness. Basic assumptions are usually taken for granted and.
they express a group's accepted relationship to the environment, their concept of human nature, activity and relationships, reality, time, and space. They include the theories-in-use, which are the implicit assumptions that actually guide behavior and tell members of a group how to perceive, think, and feel about things. Basic assumptions tend to be non-confrontable and non-debatable. The basic assumptions level of culture is holistic and integrative, since it incorporates theories about: beliefs, values, norms and emotions. The researcher found that in the CCLO sequence a new organizational culture was created since the three stages of culture were present.

7.3.1 Acculturation

Culture learning is the natural process to internalize knowledge needed to function in society. People become enculturated in their native culture as a process of growing and maturing. During the process of enculturation people develop a sense of cultural identity and acceptable societal values and beliefs.

During the process of acculturation, people develop a new world view and new systems of belief and acceptable behavioral patterns, through a series of stages of acculturation (Damen, 1987). Since in CCLO I an organizational culture was created, the new participants in the CCLO II class had to become acculturated in the learning community by experiencing some of the levels of culture learning illustrated in Table 7.1.

The researcher found that in terms of the organizational culture developed in the CCLO I learning community, new members of the community had to go through the first two stages of culture learning, ethnocentric and euphoria, before they formed part of the CCLO learning community sequence. Underlying the cultural perspective
Table 7.1: Levels of Culture Learning

<table>
<thead>
<tr>
<th>Stage of Culture</th>
<th>Cognition</th>
<th>Affection</th>
<th>Action</th>
<th>Acculturation</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Information</td>
<td>Perception</td>
<td>Awareness</td>
<td>Ethnocentric</td>
</tr>
<tr>
<td>2</td>
<td>Analysis</td>
<td>Appreciation</td>
<td>Analysis</td>
<td>Euphoria</td>
</tr>
<tr>
<td>3</td>
<td>Synthesis</td>
<td>Revaluation</td>
<td>Evaluation</td>
<td>Conflict</td>
</tr>
<tr>
<td>4</td>
<td>Comprehension</td>
<td>Orientation</td>
<td>Accepting</td>
<td>Reintegration</td>
</tr>
<tr>
<td>5</td>
<td>Insight</td>
<td>Identification</td>
<td>Interactive</td>
<td>Assimilation</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Adaptation</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Adjustment</td>
</tr>
</tbody>
</table>

is the concept of community and the importance of shared meanings and shared values (Sergiovanni. 1992b).

7.3.2 Summary of Findings

1. Culture creation in a learning organization does not follow a logical progression of steps but at the end, the learning organization's culture included all three levels of culture.

2. The created learning organization's community culture reflected the individual and collective experiences of the class participants.

3. Exploring values from different perspectives was vital for the co-creation of the learning organization's culture.

4. It is possible to create a learning culture on the foundation of double-loop learning in a graduate classroom setting.

5. The learning community members consciously created a classroom culture significantly different from the traditional classroom culture.
6. The created learning culture adapted as a consequence of new knowledge and practice.

7. Acculturation of new community members was important in the act of co-creating a new classroom culture.

8. The cultural values encouraged by the learning community merged American cultural values with global cultural values.

9. The learning culture was enhanced by the large student diversity in terms of educational experiences, educational levels, educational disciplines, countries and regions of origin, age, sex, and ethnic background.

7.3.3 Learning Outcomes

1. The learning community members created a learning organizational culture.

2. The culture created in the learning organization included the three levels of culture: artifacts, beliefs and basic assumptions.

3. The learning community culture reflected the individual and collective experiences of the class participants.

4. The culture created in the learning organization was adaptive.

5. New community members needed acculturation to become part of the learning community classroom culture.
7.4 Emergent Theme Three—Community

Another emergent theme of the CCLO sequence was community. From the data analysis the researcher found that community in the CCLO sequence was related with four emergent clusters: vision and communication, which had a casual relationship on community; belief, that was part of community; and, learning which was a property of community. These relationships are illustrated in the conceptual map of community in Figure 7.4.

Communities are comprised of interpersonal relationships as a result of shared practices. The image of learning community implies a different kind of leadership and learning. Leadership in a learning community flows from the community member's
learning needs. Since learning a particular practice does not occur independent of that practice's community, learning involves inhabiting in a community's culture.

Co-creating the learning organization's community in the CCLO sequence required many skills. The creation of the learning community in the CCLO sequence included: 1) the physical arrangement of the room. 2) the feeling of the room. 3) the emotional culture. 4) the conceptual framework and. 5) the ground rules that guided the inquiry.

The creation of community in the learning organization of the CCLO sequence was evident during the first ten weeks of the CCLO I class, in which community norms were established and became the cultural norms. Although, the first class established the norms for the learning organization sequence, modifications and adaptations were made as the class welcomed new members, to help integrate them into the learning community.

Other instances in which the creation of community in the CCLO learning organization was evident was in the creation of numerous exercises designed by the class members to create community by allowing community members time alone to reflect, absorb and. to keep the integrity of their inner self. Other modules that were created to build community dialogued about the nature of safe-space. basic assumptions. facilitation. human nature. personal beliefs. relaxation and stress release. feelings and emotions. change. values. practical theory. paradigm shift. mission. norms and rules and. personal characteristics.

In the co-creation of the CCLO community participants took intellectual and emotional risks. since on many occasions participants were working outside their educational field. In class, half of the community members were from the colleges of engineering and education and therefore had no experience in the world of PPM.
Part of co-creating a learning community is developing a culture of trust, cooperation and diversity among the class participants. In the CCLO sequence, trust was fostered by a classroom space that was hospitable, inviting, open, trustworthy and free. The safe-space allowed students to explore difficult topics while helping community members deal with the difficulties of the educational inquiry.

The co-created norms of the community encouraged an acceptance of:

- diverse viewpoints.
- ambiguity, confronting inadequacy of concepts.
- conflict as a learning opportunity.
- the need of honesty and trust.

The safe-space created in the learning community invited students to find their voices, by being able to express their ideas, emotions, doubts in the learning forum. Some pedagogical techniques used for the creation of community included dialogue, reflection and active experimentation. These were all important features for community members since new and controversial ideas were constantly being explored, knowledge was co-created and exchanged and, emotions shared. The use of dialogue and silence added a new dimension to the landscape of the CCLO learning community. Figure 7.4 illustrates the relationships between these concepts.

The CCLO sequence produced an emergent community with self-reinforcing strategies. These strategies were based on the patterns of interaction among community members. The space created in the classroom led to the emergence, maintenance and transformation of patterns of activity. Members of the CCLO community behave like
adaptive agents who change their strategies as a result of the interactions they had with other agents (Cohen, Riolo, & Axelrod, 1998). The CCLO learning community fostered personal change and growth. The role of the learning community was to facilitate learning by:

1. setting a positive climate for learning.
2. clarifying the purposes of the learning community.
3. organizing and making available learning resources for the members.
4. balancing the intellectual and the emotional components of learning.
5. providing a space to share feelings and thoughts.

The class provided an environment where learning was viewed as a process and the learner was actively involved in the process. Most of the responsibility for learning was shifted from the professor and the coaches to the participant and the learning community. The learning process included cognitive, affective and physical activities that involved at some point during the instruction the whole person.

The participants in class were expected to experiment with new ways of behaving. The goal of this action was to help participants: 1) develop a physical, emotional and mental awareness of themselves, 2) learn how groups function and the consequences of different group actions or processes, 3) learn how groups interact with one another, 4) learn how to learn and 5) learn how to become a learning organization.

7.4.1 Summary of Findings

1. It is possible to co-create a learning community in a graduate classroom setting.
2. The class participants co-created a learning community different from the traditional classroom culture/community.

3. The bases of community building in the learning organization were the creation of safe-space, development of reflective skills and encouragement of open communication and risk taking.

4. The co-created learning community facilitated the holistic development of the participants since learning, personal change and personal development in the areas of emotions and communication were accomplished.

5. The learning community encouraged the exploration of diversity of viewpoints, ambiguity and difference in participant’s mental models.

6. The disciplines groups studied concrete ways in which to create a learning community by questioning the meaning and concepts that encompass community.

7. The participants organized a number of activities to explore leadership competencies seldom studied in academic settings before.

8. The learning community explored new avenues of educational practice, without being actual educational practitioners.

7.4.2 Learning Outcomes

1. A learning community was co-created in a graduate classroom setting by class participants.
2. The bases of community building in the learning organization were the creation of safe-space, development of reflective skills and encouragement of open communication and risk taking.

3. Community development focused on both the intellectual (cognitive) and emotional (affective) components of learning.

4. The co-created learning community had a classroom culture different from the traditional culture.

5. The co-created learning community facilitated the holistic development of the participants.

6. The learning community explored new avenues of educational practice.

7. The learning community encouraged the exploration of diversity of viewpoints, ambiguity and difference in participant's mental models.

8. The learning organization participants organized a number of activities to explore leadership competencies.

9. The learning community stressed the importance of personal, group and organizational vision development seldom studied in academic settings before.

7.5 Co-creation; a Complexity Theory Perspective

The complexity theory perspective is the topic that frames all the emergent themes in CCLO. The framework of complexity encompasses the three emergent themes of the CCLO sequence change, culture and, community because a learning organization is a complex adaptive system in the American society's environment.
In the CCLO sequence the six disciplines were practiced. In the two cases the study of personal mastery, mental models, shared vision, team learning, systems thinking and facilitation were achieved. Also, the six disciplines were integrated as part of the overall framework for the class sequence. The practice of the six disciplines was crucial for the development of community, culture and change. In CCLO I participants worked in their individual groups, while in CCLO II participants worked across disciplines. For example, participants from the systems thinking team also belonged to the personal mastery team and the shared vision team merged with the team learning team for the entirety of the class.

The sequence as a whole presents the expression of two different, but complementary theories of action. Cases 1 and 2 co-create the learning organization, the whole. The theory of action of the class is holistic, since it included exercises to address the cognitive, affective and physical level by combining all the discipline sequences. These three levels of human functioning give life to a culture and community where emergent outcomes are valued. The descriptive account presented in chapters 4 and 5 elucidate the dynamics of the theory of action for the learning organization.

The learning environment was set for the development of self-organization by the students. The original framework of the CCLO sequence provided enough structure for the students that needed guidance while at the same time, provided the freedom to experiment. Freedom to experiment includes both, the freedom to succeed and the freedom to fail, without any grade related consequence. The learning environment created a space where personal and professional problems could be aired without fear of retribution.
In CCLO first order changes were expected and second order changes were explored. First order changes refers to changes in behavior, whereas second order changes refers to changes in schema. The testimony during final summations in both CCLO classes attest to the power of second order changes in the class. The story by the facilitator from systems thinking group that had accepted a new job is an example of a second order change.

Edge of chaos or far-from-equilibrium conditions were created in the sequence by the learning community members. These conditions fostered mental, physical, emotional and spiritual exploration as exemplified by the nails icebreaker (mental), the Totem pole exercise (physical), the NLP three positions exercise (emotional) or the Lady of Cholula trance (spiritual). Reflection or thinking about practice was exemplified in the story about the soccer team.

Student development from a complexity perspective encompasses the development of several competencies. While practicing the six disciplines leadership students enhanced their ability to:

1. Self regulate and maintain a core in constantly shifting context.
2. Behave as a contributing member of an entrained synchronous system.
3. Recognize interdependence among components of a situation.
4. Integrate and sees patterns across bounded situations.
5. Improvise and create new combinations out of disparate elements.
6. Have flexibility in the face of unpredictability.
7. Be reflexive by looking at one's experience and utilize it for future action. See paradox in their actions and interventions.

8. View situations as emergent


10. Create and integrate knowledge of practice, knowledge in practice, and knowledge about practice.

7.5.1 Emergence

Organizations often experience change as an “emergent” process. Casti (1997) defines emergence as an overall system behavior that comes out of the interaction of many participants – behavior that cannot be predicted or “even envisioned” from knowledge of what each component of a system does in isolation. Emergence refers to the arising of novel and coherent structures, patterns, and properties during the process of self-organization in complex systems. Emergent systems are dynamical, they are not a pre-given whole, but their form arise as the system evolves over time. The course experience that was co-created by the community of learners had the main properties and characteristics of emergent systems. These are:

1. Radical novelty.

2. Coherence.


4. Dynamical.
The CCLO sequence had coherence that is illustrated in chapter 6. Each discipline group designed a coherent sequence. Since there was no link between the planning of most modules the nonlinearity of the design subverted the hierarchical ordering of traditional pedagogy. The apparent randomness in the sequencing of the modules challenged the students to engage in the process of self-organizing the information presented in the class.

The CCLO learning sequence evolved in a nonlinear manner where agents (participants) self-organization in teams for practice. Each class session was characterized by a state of far-from-equilibrium, and a new point of self-organization. A final state of equilibrium was never achieved since each class was an opportunity to create far-from-equilibrium conditions and reach new states of self-organization. Emergence
also requires nonlinearity, self-organization, and far-from-equilibrium conditions. The icebreaker and debrief had emergent properties.

The role of emergence is explanation since it provided more explanatory insight into the dynamics of the system than do explanations based on the parts alone. In this study, emergent change was discussed in terms of the subgroups within the organizational whole. The emergent nature of change as experienced by the members of the organization was studied: and the experienced sense of change, that the whole is bigger than the sum of the parts, was captured.

The class engaged in double-loop learning by adding features, such as the flow-master as needed to the organization of the class. The concept of self-organization became prominent as each individual interacted with the community as either an individual or a team member of a discipline team.

Complex adaptive systems are composed of large number of interacting variables, parts, or agents, interrelated in an essential way. Since the CAS cannot be analyzed by decomposition into simple independent parts or subsystems (Pines. 1998). This study described the totality of CCLO class. Each participant in the class was an agent that responded in a nonlinear fashion to one another and to changes in their external environment.

This study describes the activities that must take place to initiate and carry out a successful organizational change. In CCLO the process can be illustrated by adapting Lewin’s change model. The CCLO model of teaching and learning involves a constant iteration between:

- Removal of equilibrium by agents

- Edge of chaos is reached
- Entrainment phase

- Self-organization is achieved

The removal of equilibrium happened in every class since there was no reassurance that the previous week's topics and activities were going to be continued. Individual agents had the power to engage the system (learning community) in whatever experience they deemed appropriate. The state of edge of chaos is when a system is in a state capable of change. This state was evident as CCLO learning community members met every week and interacted with new methods and topics not previously discussed in any other academic course.

Entrainment occurs when two or more systems join to become a larger synchronous system. During the process of CCLO the different discipline groups achieved synchronicity of purpose. This was expressed by community members as reflection on exercises or classes that "really worked." The final goal of each evening in this iterative process was self-organization. Self-organization is the spontaneous reemergence of a turbulent system into patterned behavior that is purposeful and coherent. The safe space created in the CCLO classroom culture provided an outlet for the system to become turbulent and by the end of most class periods reached a state of self-organization. An exception to this was the Mystery Topic module, that produced a great amount of reflection and double-loop learning, which took more than one class session to achieve self-organization.

The CCLO class exemplified reflection and reflection-in action (RAC) in a variety of modules. In CCCLO I the personal mastery team sequence used RAC for 3 out of their 6 modules. The personal mastery modules were balanced between the physical and emotional domains. The team learning team dealt with RAC for 2 out of 4
modules and were all concentrated in the mental domain. The shared vision team used RAC for 3 out of their 4 modules and the modules dealt with the emotional and mental domain. The facilitation team used RAC for 6 modules which encompass their total sequence. The facilitation team modules dealt with the mental domain. The mental models team used reflection for 4 out of 8 modules. The mental models modules dealt first with the mental domain during modules 1 through 6 and modules 7 and 8 dealt with the emotional domain. The systems thinking used RAC for 2 out of 4 modules and their modules dealt with the mental domain.

In the CCLO II sequence the NLP team used RAC for the Circle of excellence module. The NLP sequence balanced the cognitive, emotional and physical domains in their sequence. The NLP group co-created a sequence of 2 modules for each domain. The personal mastery group used RAC for 2 out of their 4 modules. Three of their modules centered around the mental domain and one focused in the physical domain. The shared vision team used reflection for 2 out of their 4 modules and all their modules dealt with the mental domain. The systems thinking group used reflection for 2 out of their 5 modules. In CCLO II all the systems thinking modules were originally designed for the mental domain although, their sequence evolved into one that dealt primarily with the emotional domain.

7.5.2 Findings

1. The class had an emergent properties since the whole arose out of dynamical constructs (not pre-given).

2. Nonlinear interactivity was the basis for the cultural levels, community development and change process.
3. Self-organization revealed the adaptability of the agents (students) in the system (class).

4. Emergence is not pre-given and neither was the co-created culture.

5. Change was an emergent process, where the whole (collective experience) was bigger than the sum of its parts (individual modules).

6. Complexity was not an actual theme for the class it is the variable that integrates all the other concepts.

7. The complexity perspective explains and provides insights of what happened in terms of change, culture and community.

8. The complexity perspective explains the concept and process of co-creation.

9. In order to co-create one has to have all the attributes contained in complexity.

7.6 Implications

The implications of the results of this study can be explored in these ways: implications for design, implications for practice—pedagogy, and implications for leadership development.

7.6.1 Implications for Design

From the study of CCLO some implications for the design of similar courses became apparent. These were:

- In an information age where knowledge is fluid and relative, courses of study should be designed to allow students to encourage a complexity view of problems and possible solutions.
• The complexity perspective plays an important role in this new approach for teaching and learning. Activities should be designed to encourage reflection, trial of new actions and behaviors, and the practice of double-loop learning.

• As an educational designer the co-creating perspective offers a different paradigm for planning, developing and implementing educational innovations.

• A missing aspect of educational design is the lack of specification of how to create the learning environment and a learning community.

• Personal development is an important factor of culture creation.

• Work consciously on culture study and culture creation. We need to establish clear benchmarks for community creation.

• Create a safe-space for culture learning, creation and exploration.

### 7.6.2 Implications of Practice—Pedagogy

The conditions that foster self-organization are different from those currently used in pedagogy. By allowing the students to create their own learning experience and providing a wealth of resources, co-creation can be accomplished. The teacher of record in one more resource in the long list of resources. The coaching team is composed of a number of experts including educators, by educators I mean those who have studied teaching as their profession. Education as an academic discipline. Professors are people who has a profession and by virtue of an academic credential in a disciple is able to teach at the college level a discipline other than education. Most professors in academia profess a discipline other than education. They are professional practitioners but not educators. When creating any educational change
one has to make sure that educators are included in the coaching team. Throughout the history of the CCLO course professional educators have always been part of the co-creating coaching team.

Other implications for pedagogy were:

- Participants in the course used teamwork to coordinate their individual activities in order to achieve an objective, not to subordinate their individuality to the group.

- In order to make any human system stronger we need to create stronger relationships. This type of course encourages knowledge creation of practice (theory) and about practice (metatheory). Use personal development as topic of study and as an outcome of the educational endeavor.

- Change the perception of the relationships of teaching—learning, teacher—learner to include teacher as learner and learner as teacher.

- Encourage practice and research about practice in the classroom setting from a complexity theory perspective.

- Treat culture, emotions, communication and self-awareness as major components in the study of leadership.

- Educational innovations in practice are adopted when the culture of the innovation is understood and embraced by the practitioners.

7.6.3 Implications for Educational Leadership

From the study of CCLO some implications for the design of similar courses became apparent. These were:
• Leadership courses should devote time to the study of self-leadership as part of the curriculum.

• Participants should be introduced to some of the concepts of non-hierarchical, non-linear leadership.

• Encourage reflection on action and practice.

• Provide the necessary time and opportunity for self-reflection and shared reflection.

• Develop in leaders the skills of listening and dialogue.

7.7 Future Research

This study indicated that there are themes and areas that need further exploration and research. Such themes as the need for acculturation of new members of a learning community or the creation of a learning organization in other academic discipline areas. These themes have the potential to further our understanding of the characteristics and influences affecting participants in a co-creating learning environment.

This study need further research from the students learning experience. From an individual student point of view:

1. What is the process of co-creation?

2. How do the individuals in the learning teams co-create their own learning?

3. How do the individual learning outcomes enfold throughout the year?
4. How do particular students integrate what they have learned in the class in their personal and professional lives?

5. What additional growth and learning experiences did participants seek?

6. What type of student chooses to participate in co-creating their own learning experience?

7. How do different elements of learning styles and psychological type affect the type of community co-created?

8. What are the attributes in terms of type and learning styles of the students that choose to co-create their own learning experience?

This study need further research from the students learning experience. From the instructional designer’s point of view:

1. Frequency of change and the number of times participants were asked to be vulnerable.

2. How can we evidence reflection across classes?

3. The number of times participants had to adapt and adopt new behaviors and schemas?

4. Since the activities had structure and the modules were scripted, how many times did the actual map was changed?

5. How does current learning technologies support co-creating a learning organization?
6. How is community and culture supported by the use of technology?

7. How do participants use technology?

8. What technologies do participants use to co-create a learning organization?

Further research could be done from the academic institution’s point of view:

1. How does co-creating a series of courses changes the shape of the information and skills provided by the program?

2. What are the implications for accreditation if a majority of the program was co-created by the students?

3. What do coaches and professors-of-record learn from the co-creating experience?

4. How does the concept of co-creating ones own learning experience work in other academic disciplines?

5. How does the concept of learning organization is applied in other academic disciplines?

7.8 Recommendations

This study made clear that in order to co-create a CAS learning community the learning environment should:

1. Seek out diversity in schemas, as they enhance and make the community stronger.

2. Create a safe-space for culture creation and exploration.

3. Foster trust through dialogue and interaction.
4. Work consciously on culture study and culture creation.

5. Establish clear benchmarks for community creation.

6. Foster personal development as an important factor of culture creation.

7. Provide time and opportunity for self-reflection and shared group reflection.

8. Validate both individual and group experience as a source of knowledge.

9. Seek to understand and apply the concept of double-loop learning.

10. Encourage reflection on action and practice.

7.9 Conclusion

As a final summation, a master class is a presentation of a teaching practice in the arts. A master in its field evaluates and improves the performance of any practitioner by suggesting changes in performing. For practitioners in the field a master class is a way of getting new ideas of how to improve their practice. For students ways of improving their performance. ideas offered from a different point of view.

In this research study an innovative way of providing graduate education in a laboratory setting is presented. The course experience was originally set as a policy laboratory in which the professor expected to carry out an emergent simulation of a learning organization. Although. the class was originally set as a policy laboratory. the researcher used it as an educational laboratory about teaching practice. As a teaching laboratory the techniques and expectations of the sequence add a new dimension to graduate pedagogical practice.
The application of this research to pedagogical practice is a useful tool for rethinking how graduate education is carried out, the paradigm that we should use in teaching and, a as a way to introduce curriculum change in academia. The co-creating a learning organization sequence is an innovative model for graduate teaching practice in academia.

Educational reformers suggest that curriculum in academia should be restructured. One way of achieving this goal is by implementing educational innovations based on organizational change. Innovations such as the CCLO course sequence places the curriculum creation in the hands of the students.

Co-creating a learning organization requires an environment with a minimal amount of initial structure. Since CAS inherent order that unfolds with the experience of the system, the initial structure of the class must be one that loosely sets some parameters for co-creation. Freedom of choice is a main component of this structure and, is integral in creating an open-ended environmental space for creativity. CCLO embodied this freedom of choice by allowing participants to co-create their own learning experience through interaction with all of the community members. Interaction itself created unique classroom patterns.

The CCLO sequence developed as a class where every participant was concerned about each others' well-being. The community of learners stressed, as Fullan (1999) suggested, listening to ones' inner voice. The CCLO sequence fostered reflection in action, a risk taking mentality, trust in both people and the process, appreciating the total person and, balancing personal life with academic and career lives.
APPENDIX A

COURSE SYLLABUS

PUBLIC POLICY AND MANAGEMENT 880V06

CO-CREATING LEARNING ORGANIZATIONS

CO-LEARNING TO LEAD & LEADING TO CO-LEARN
CO-LEARNING TO TEAM & TEAMING TO CO-LEARN
CO-LEARNING TO ORGANIZE & ORGANIZING TO CO-LEARN

Winter 1998
Professor Robert W. Backoff Credit Hours: 5
Office 212B Hagerty Hall Time: Wednesday 6:30-9:30 PM
Phone: 292-6118 Room: 217 HH
Office Hours: Wed: 4-5:30

COURSE DESCRIPTION

The focus of the course/workshop is co-creating learning organizations through collaborative learning teams and networks in public and not-for-profit organizations. Six learning disciplines will be explored and enacted:

1) Personal Mastery and Leadership
2) Mental Models: Enneagram, Myers-Briggs Type Indicator, etc.
3) Shared Vision and Values Driven Commitment
4) Team and Network Learning
5) Systems Thinking and Modeling/Mapping of Dynamic Systems
6) Facilitation Skills and Processes

The workshop participants will engage in learning experiences to build personal mastery of strategic leadership, teaming, and learning organizations. The course complements PPM 810 Strategic Management, PPM 811 Human Relations in Public Management, and PPM 880 G 06 Strategic Leadership. As a policy/learning laboratory, the workshop emphasizes practical application of ideas, principles, practices, and methods in public and not-for-profit agencies.
BASIC OBJECTIVES

1. To provide an understanding of strategic leadership in the public and third sector learning organizations.

2. To build personal action and facilitation skills in selected practice & competency areas of leadership, teaming, and learning organizations (and networks).

3. To provide facilitation services to client learning organizations.

TEXTS:

- Peter Senge, et. al, THE FIFTH DISCIPLINE FIELDBOOK (1994) (Pbk)
- Don Riso and Russ Hudson, PERSONALITY TYPES (1996) (Pbk)
- Helen Palmer, THE ENNEAGRAM IN LOVE AND WORK (Pbk)
- Anne Linden, MINDWORKS (1997) (hardbound)

In the Wings as a Supporting Resource:

- Peter Senge, THE FIFTH DISCIPLINE
- Roger Scharz, THE SKILLED FACILITATOR (Pbk)
- Stephen R. Covey, THE SEVEN HABITS OF HIGHLY EFFECTIVE PEOPLE (Used in PPM 880G06)
- Steve Bucholtz AND Thomas Roth, CREATING THE HIGH PERFORMANCE TEAM (Used in PPM 880G06) (Pbk)
- Peter Kline AND Bernard Saunders, TENS STEPS TO A LEARNING ORGANIZATION (Used in PPM 880G06)
- Steven Cavaleri & David Fearon, MANAGING IN ORGANIZATIONS THAT LEARN (1996 Pbk)
- Sarita Chawla & John Renesch (Eds.), LEARNING ORGANIZATIONS
- Richard S. Wellins, William C. Bynam, and Jeanne M. Wilson, EMPOWERED TEAMS

Workshop Preparations: It is assumed that class members will come to class fully prepared to engage in action having done the assigned pre-workshop readings and out of class preparations. NOTE: after the first few sessions, you are responsible both to finish reading the books for the course and to do "just in time" readings or reviews of past readings for the upcoming session.
WORKSHOP OUTCOMES FOR PARTICIPANTS:
1. Understanding of the Six Disciplines for Learning Organizations
2. Practice of the Six Disciplines for Learning Organizations in and out of the workshop
3. Practice in integrating the Six Learning Organization Disciplines

PARTICIPANT RESPONSIBILITIES:
1. **CREATE A LEARNING CONTRACT FOR YOURSELF.** Using the format handed out in the workshop, you are to identify your learning goals/outcomes for the quarter. There will be two phases of the contract. Phase one covers the first five weeks; it will be due to Dr. B in session 2 (Jan. 14). It will be reviewed for accomplishments and learnings when you meet with Dr. B during the fifth or sixth week (Dr. B will handout a sign-up sheet in week four). An updated phase two contract is due to Dr. B in week five to discuss at the meeting with Dr. B., it covers both continuing and emergent learning objectives. Phase 1 and 2 results and learnings with be shared with Dr. B in a second meeting during the tenth week of the quarter (sign up sheet out by week 9). (10%)

2. **PARTICIPATE CREATIVELY, ACTIVELY IN ALL WORKSHOPS.** Attendance is assumed except for emergencies; tell Dr. B. in advance if possible. Each student will facilitate with others one Warm Up of Ice Breaker (15 minutes) OR one Debriefing (10 minutes) during the ten weeks. Extra credit if you chose to do one of both! (20%)

3. **KEEP A LEARNING DISCIPLINES JOURNAL (LDJ).** LDJ's are to be shared with Dr. B on 2/4/98 and again on 3/11/98 (or at meeting with Dr. B). The Journal will include a description of your learning objectives, events and actions, outcomes, learnings for phase 1 & 2 of the quarter. It will record most of your in/ten entries & out of workshop learning discipline activities (e.g. totaling at least 20 entries. (20%) See LDJ guidelines below.

4. **CREATE AND FACILITATE IN THE WORKSHOP** One or two LEARNING MODULEs in Phase 1 of workshop which meets learning objectives of the workshop and applies one or more learning disciplines. CREATE AND FACILITATE a third or fourth MODULE in Phase 2 of the workshop. Co-create these two modules with at least one other individual. (20%)

5. **ASSIST A CLIENT LEARNING TEAM/ORGANIZATION** through observation, feedback, and learning discipline facilitation. Coaches and participants have arranged some opportunities in advance; other opportunities will emerge during the quarter. (20%)

6. **MEET TWICE WITH DR. B TO EXPLORE YOUR LEARNINGS AND LDJ's, once in week six, and again in week ten (see above).**
APPENDIX B

LEARNING DISCIPLINE JOURNAL GUIDELINES

Guidelines for Learning Disciplines Journal

Learning Aims

The Strategic Learning Journal (LDJ) is a practical device to aid the learner in making the connections between theory and practice in the strategic leadership, teaming, and co-creation of public learning organizations. The LDJ, if carefully used by the learner, brings together the theories of learning organization and teaming, on the one hand, and the way the learner thinks, feels, and acts in leadership situations especially as a facilitator, on the other.

The LDJ is based on an approach to learning that suggests that the most significant learning about strategic leadership is grounded in, though not limited to, the experience of the individual and teams. Whether we are students or practitioners, we all have a variety of experiences that, if used constructively, can contribute to our understanding of group/team and organizational life. We act in leadership capacities; we work in teams or groups; we read and discuss theories of organizational learning and strategic change; we engage in learning activities; and we come up with new ideas about possibilities of effective leadership, teaming, and developing learning organizations. By ACTIVELY REFLECTING ON OUR EXPERIENCES and by DRAWING GENERALIZATIONS from them, we can LEARN important LESSONS about the way HUMANS, TEAMS, AND LEARNING ORGANIZATIONS WORK. In sum, the LDJ is an aid to becoming a double loop learner--learning how to learn.

The LDJ format also assumes that we need to involve ourselves as whole personalities in the process of learning from our experiences. In a sense, we are what we learn, thus we must deal with issues of the heart as well as the head. We must be concerned not only with what we think but with what we feel, not only with what we do but with who we are. The LDJ encourages us to consider all aspects of ourselves as we approach the learning process; it suggests that our understanding of strategic leadership is guided just as much by our inner experience as by our outer experience.

Contents:

1. Include reflections/new action possibilities on all rehearsal/exercises/learning modules that grab your interest(at least one/two each workshop meeting)
2. Include assignments given in class for entries.
3. Include entries on out of class activities with fellow participants and/or clients.
4. Add any other entries you find relevant
5. Total entries approximately 20-25.
General Guidelines

1. You may want to type your entries, or write in a notebook or on a set of note paper, or dictate the entry into a cassette recorder.

2. Be informal in your writing (or diagramming or poetry...); let your thoughts and feeling flow naturally. Don't make the entry like a legal brief or course essay. You want to see what comes out naturally! It may come out in many different forms; that is just fine! There are many modes of expression; that is a gift to us.

3. Bring your early entries to your meeting with Dr. B. and have questions ready regarding the LDJ.

Guiding Questions

For each entry, respond to and reflect on the following (by the numbers or not by your preference):


2. What did you do, both passively and actively, during that time? (listen, talk, think, lead, etc.)

3. How did you feel at various times during the episode? (some feeling words might come to mind such as-joyous, excited, bored, assertive, insecure, adequate, spineless, stubborn, panicky, cooperative, deferential, etc.)

4. How do you feel/think others were feeling during that time?

5. Looking back to the event/interaction and taking a more detached view, what produced the results achieved? How did you personally impact the group and it you?

ITEMS 6 AND 7 BELOW ARE THE MAIN COMPONENTS TO HIGHLIGHT:

6. Still taking a detached view, but now looking ahead to a similar situation, what would you do differently to produce both a better process and result for yourself, other group members, and the group as a whole? TRY FOR 3 NEW ACTIONS FROM EACH ENTRY AND TRY IT OUT (See # 7)

7. If you are in another group or interaction context (2 or more people with some common goal) this coming week, practice a new or modified approach and see what happens ("apparent failure" is valued even more highly than "apparent success" by strategic managers). Make a new entry—comparing your experiences for similarities & differences in task; your experience, actions, feelings; other's acts; processes and outcomes, etc.
APPENDIX C

LEARNING ORGANIZATION DEVELOPMENT WHEEL

SHARED VISION
- Principled practice
- Values alignment
- Inspiration
- Goals
- Vision
- Vitality
- Mobilize commitment
- Sense of Purpose (F)
- Motivation (F)
- Clarity (F)
- Co-develop vision (F)
- Engagement (F)

TEAM LEARNING
- Cooperation
- Dialogue
- Listening
- Creativity
- Promote harmony
- Encourage relationship
- Co-design (F)
- Self-expression (F)
- Contribution (F)
- Social unity (F)
- Relationship (F)

MENTAL MODELS
- Insight
- Introspection
- Challenge assumptions
- Innovation
- Meaning (F)

SYSTEMS THINKING
- Expansionist thinking
- Understanding connectivity
- Intuition
- Perspective
- Integration
- Understanding the whole (F)

PERSONAL MASTERY
- Compassion
- Self and other acceptance
- Shared power
- Authenticity
- Nurturance of spirit
- Moral leadership
- Sensitivity
- Humility
- Mastery
- Growth oriented
- Risk taking
- Self directed
- Tolerance
- Value ambiguity
- Learning commitment
- Trust
- Spirituality
- Ego subordination

- Encouragement (F)
- Acceptance (F)
- Empowerment (F)
- Trust (F)
- Self discovery (F)
- Worthiness (F)
- Dignity (F)
- Autonomy (F)
- Fulfilled potential (F)
- Growth (F)
- Supported choice (F)
- Independence (F)
- Space to make mistakes (F)
- Support in transition (F)
- Learning (F)
- Responsibility (F)
- Self - other connection (F)
- Ownership of results (F)
APPENDIX D

FULL VALUE CONTRACT

Full Value Agreement Guidelines Winter Quarter 1998

- Know what the rules are.
- Come to class prepared to participate because of group learning experience.
- Be ready to participate - allow passive participation.
- Participation should be encouraged not forced.
- Ensure learning throughout the quarter - participate actively.
- Everyone should be given a chance to participate and freedom to abstain
- Allow spontaneous approval not just in a circle.
- Respect when people choose to pass.
- Freedom to express or not.
- Have self control not to dominate the group.

- Don’t interrupt.
- Listen when others are speaking.

- Recognize importance of how humor can be harmful - be careful.
- Define when laughing/joking/playful behavior is appropriate and not.
- Know sensitive pressure points.
- Observe and respect others’ safe-space.

- Allow people to state beliefs and not feel retaliation.
• Honor/respect different views. Tolerance of others' ideas and beliefs—no lashing out.
• No personal attacks.
• Everyone must truly have an open mind - don't hide behind "I" or beat up others as "E" Respect right to have different feelings.
• Honor a felt tension by allowing it to rise.
• Allow poignant questioning of others.
• Feel free to inquire and question as we go along - talk through to understand.
• Ask for clarification to truly understand without feeling like you escalate conflict.
• Invite the group to let go of the word criticism—move toward constructive feedback.
• Specify behaviors that represent congruence and discrepancies here and now as they occur.
• Allow people to indicate when they need a break from feedback—"I can't take anymore for now."
• Need circle of time to nurture aspects of apology or validate others.
• Be Catalytic - draw people out and add to more ideas. move forward, make linkage, springboard and move ahead.
• Commit to practice what we learn.
APPENDIX E

LADY OF CHOLULA POSTURE
References

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