AN ABSTRACT OF THE DISSERTATION OF

Janice K. McMurray for the degree of Doctor of Philosophy in Education
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Charles Carpenter

Demands for increasingly more responsive education systems have
caused some higher education institutions to reconsider their original
missions and envision new futures. This is particularly true with land grant
institutions whose mandate it is to be the people's university. The purpose of
this study was to explore the first year of a change project at a land grant
institution to determine first attempts to prepare for and catalyze systemic
change. The literature review supported the position that change was seldom
enduring in higher education organizations, and to effect systemic change an
organization needed to embrace the concept of learning. This study sought to
make sense of organizational change through the experience of an
innovative vision-driven, participant-centered change process.

Data were analyzed using multiple sources including interviews,
fieldnotes, project documents and participant observation. Three themes
emerged from the analysis representative of participant experience: Learning
How to Change; Developing a Change Design; and Collaboration and the
Paradox of Partnership. The themes represented primary areas of learning for

participants in the first year of the project. Stories of participant learning were expressed through key events experienced during the 12-month inquiry.

Outcomes of this study reflected the centrality of learning in the beginning months of the change project. Change agents needed opportunities to learn how to change before enlisting others in the process. Active learning, reflection, and the value discovered through an expanded capacity for change created deeper ownership in the project for many participants. These aspects of the change process were also identified as attributes of a learning organization. Another significant research outcome addressed partnering efforts in the project's initial months. First attempts to build collaborative relationships with the State's community colleges were ineffective due to low levels of trust and highly competitive cultures.

Building Capacity for Systemic Change: Episodes of Learning
in the First Year of a Grant-Funded Change Project
at a Land Grant University

by

Janice K. McMurray

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I understand that my dissertation will become part of the permanent collection of Oregon State University libraries. My signature below authorizes release of my dissertation to any reader upon request.

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Janice K. McMurray, Author

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DEDICATION

This work is dedicated to the memory of my mother and father, in gratitude and love for their deep commitment to education and the human spirit.

Building Capacity for Systemic Change: Episodes of Learning in the First Year of a Grant-Funded Change Project at a Land Grant University

INTRODUCTION

Overview

An institution's stories of change are unique to the experiences of the participants, but there are commonalties in each experience that constitute a broader understanding of the change process. It is important to seek the specific experience in order to engage the holistic concept of change. To that purpose, my research examines a single land grant university in the beginning months of an innovative change project, to unearth clues about process and participant experience that further our efforts to make sense of systemic change in higher education organizations.

The contents of this chapter build the context for my case study. An overview of current forces for change in higher education provides a foundation for the discussion of strategic change as it relates to this inquiry. Background information on the change project, both locally and nationally, creates depth of purpose for the research and its guiding questions. Language is integral to understanding the experience, and the language of change used in this project is defined for the reader. I assert throughout the report that learning is central to the change process in this University change project, and the assertion is supported with stories and rich description based in the participant experience.

Forces for Change

Why initiate institutional change? Societal shifts in the population and the introduction of new technologies impact economic and social conditions and pressure organizations to be more responsive (Campbell, 1995). The conservatism of education organizations conflicts with the increased energy of an approaching millennium, in which discovery encourages new ways of thinking and uproots conventional wisdom.

The forces for change emerging in global and national trends are significant enough to fundamentally impact America's education system. The continued fragmentation of family and community networks places the education system in the role of social, economic, and emotional provider (Bennett, 1994). Increasing accountability measures, particularly directed at post-secondary organizations, voice society's deeper discontent with the effectiveness of formalized education (House, 1994). Under the current system our institutions are unable to respond effectively to the growing needs of diverse stakeholders. Critics and friends alike strongly support systemic change in education as a remedy for society's ills (Bennett, 1994; Brock, 1993; Kennedy, 1995; Lim, 1993; Wilshire, 1995).

Initiatives directed toward fundamental change in education systems have been frequent and persistent but questionably successful, and yet reform initiatives continue to surface. Pressures for change are forcing education organizations to wake up. Higher education in particular is a primary target for that wake-up call (Campbell, 1995). The 1990s have not been kind to the nation's

post-secondary institutions, in fact they have been under fire from critics inside and outside of academe (Berube & Nelson, 1995). One critic suggested that if the post-secondary system remains unresponsive to its stakeholders, and society's problems continue to escalate in the coming years, institutions will be at risk for survival (London, 1987).

Stanley Ikenberry, president of the University of Illinois, suggested that global progress increasingly depends on establishing knowledge over ignorance. For progress of this nature to continue, universities must re-create themselves to effectively serve society (Ikenberry, 1995). Re-structuring higher education systems may not hold all the answers to society's problems, but how we connect education systems to social and economic productivity may decide how we approach organizational change. It may be that responsive environments emerge from institutions in which formal and informal systems work in unison for the common good.

Perceptions of change are changing. Conservative education organizations can no longer rely on change to be a slow and predictable process. Change in institutions is increasingly described as rapid and continuous (Curry, 1992). Staying in the market niche requires anticipating external forces with swift action. The current explosion of complexity tied to new technologies and information access may be reasons for the image of rapid change (Hughes & Conner, 1989).

Technological innovations, economic set-backs, and societal fragmentation continue to exert pressures on higher education to be all things to all people.

Fundamental change resulting from these pressures will be externally imposed unless post-secondary institutions actively respond to changing environments and increasingly diverse populations (House, 1994). It is no surprise that urgent change of this nature evokes fear and resistance from an academic community long protected and revered.

We do know that higher education organizations are beginning to reflect on the relevance of their current missions and visions. Budget constraints and sluggish institutional response mechanisms exacerbate an increasingly fractured system (Kennedy, 1995). The complex structure of higher education institutions and the shift toward individual research as a primary form of scholarship encourages an environment of isolation and competitiveness within the academic community (Boyer, 1990). This organizational model blocks the responsiveness demanded by a rapidly changing society.

Land grant institutions in particular are seeking ways to respond to changing conditions by revisiting the original land grant mandate: providing educational opportunities for the people. The land grant university system was chartered in the mid- and late-1800s by representatives of the people to serve the people (Campbell, 1995). Colleges of Agricultural Sciences in land grant universities linked community needs with research-based knowledge related to the food system. Although the links remain influential, the future of global food systems may rest on the level of innovation and responsiveness in land grant institutions to prepare for 21st century challenges. By the year 2050 experts estimate an additional 4 billion people on earth. By 2025, the demand for food in

developing countries will more than double, and by 2050 the need will triple
(The GREAN Initiative Taskforce, 1995). Land grant institutions, by their nature,
are challenged to educate professionals who are prepared to address the complex
issues of a 21st century global food system.

Institutional responsiveness describes a system listening to constituent
needs and responding with swift and thoughtful action. Responsive systems
require a commitment to changes in the greater society that resonate in the
organization (Kofman & Senge, 1993). The most fundamental criticism of the
current the land grant system is its elitist position in which the university no
longer listens to the people (Castle, 1994). Although this view may not be unique
to the land grant, it does significantly impact the original intent of the university
mission and the future of safe, nutritious food systems.

For the land grant university to remain vital in a democratic society, the
mission must be realigned and connections strengthened with existing and
potential customers and partners (Campbell, 1995). The task is daunting in an
environment of shrinking budgets and steadily increasing demands for
accountability which force priorities away from the collective endeavor.

Description of a National Change Initiative

When the dissonance between forces for change and the ability to respond
becomes damaging enough, institutions seek ways to resolve the dilemma. Some
advocates for responsive land grant systems have supported these efforts by

creating opportunities for change. In this study, a grant-making organization acted as a catalyst for change in the land grant system to support a renewed commitment to the future of post-secondary education and food systems.

This research examined the first year of a change project at a single public land grant university, referred to as Oregon State University (OSU) in the study. The project was part of a national W.K. Kellogg Foundation grant, titled Food Systems Professions Education (FSPE) Initiative, implemented through Colleges of Agricultural Sciences at selected land grant universities. The W.K. Kellogg Foundation, a grant-making enterprise established to *help people help themselves*, supports education and food systems for a sustainable global future among numerous other efforts.

The national FSPE initiative was designed as a five-year, two-phase effort to foster systemic change in land grant institutions. During the spring of 1994, the Kellogg Foundation selected 12 grantee land grant systems nationwide to form the core of its FSPE initiative. The purpose of the initiative was to create and implement a vision of education desirable for those entering or working in the world's food systems in the 21st century. Participating land grant institutions had an opportunity to create fundamental change in post-secondary education through the vehicle of *food systems*—food being basic to all people.

The purpose of Phase I was to create a shared vision of the university for the year 2020 as it related to food systems and post-secondary education. Phase II would support the implementation of the vision with continued resources.

Leaders in the national initiative created two design criteria to guide the systemic change process in participating projects. The two national FSPE criteria included:

- *Diversity* at every level of the change process

- *Collaboration* with internal and external constituents, in an inclusive process, particularly strengthening ties with the Oregon's community colleges.

These criteria were intended to guide an effort leading to fundamental change in the institution and the creation of a more responsive university system.

The character of innovation established by the national FSPE initiative conveyed the message to individual projects that uniqueness and creativity were desirable traits. The national FSPE initiative acted as the catalyst for change, while each project created its vision process unique to the conditions of the individual region and the institution's culture. Kellogg Foundation funding of $100,000 positioned individual projects to at least match the amount as a sign of commitment. It was understood that the task of engaging a university-wide change process would be challenging, because the grant had been awarded to just one area of the university, the College of Agricultural Sciences.

The Local FSPE Project Environment

In discussions about systemic change and the FSPE change project at OSU, one OSU administrator suggested, "it was the best of times and the worst of times for a change initiative to be implemented." In the past decade the State had

experienced a series of budgetary cuts in education. Higher education in

particular fell victim to measures that annually reduced university funding.

Shrinking financial and personnel resources limited the University's ability to

address customer needs in the most responsive fashion. Although this land grant

institution was known to promote connection with the community and other

areas in the education system, cynicism about the present and future status of the

University was at an all time high as stated in the Phase II proposal:

> The environment into which we introduced the project was not
> altogether welcoming for what might be perceived as yet another
> planning process and change initiative. . . . Having endured many
> institutional changes driven in no small part by a decade of budget
> cutting and other declines in public support, faculty especially were
> skeptical about whether anything they or someone else might do
> could stem the tide of resource and program reductions, and
> organizational realignments (InterACTION! proposal, Phase II,
> 1996).

Previous University vision and mission statements were so broadly

defined that the documents held little relevance to daily campus life. In such an

environment no one wanted to participate in yet another strategic planning

project. For the FSPE project to succeed, the process needed to be different,

providing individuals value equal to the sacrifice of time and resources

expended in participation.

In the midst of visible cynicism, however, pockets of innovation

characterized OSU's desire and need for creative change. A new scholarship and

rewards proposal was implemented shortly before the FSPE project began that

broadened the definition of scholarship and offered transformative possibilities

for other universities nationwide. Conversations and new research on innovation

in teaching emerged from a grassroots faculty group. Faculty experimented with partnerships and action research between disciplines and education institutions. Innovation was independently on the move at OSU. Administrative leadership verbally supported campus change and suggested the FSPE project might become a magnet, providing continuity to innovative efforts on campus.

The local FSPE project emerged in an environment that was characterized by the tension between individual need and institutional reality—the dilemma of a bureaucratic system. The challenges and consequences inherent in the demands for higher education change were like a locomotive bearing down on the academic community. As one project participant noted in the fall of 1994, "We'd better make change work this time. The train is here, but no one seems to hear it or understand the consequences."

Study Purpose and Supporting Questions

The purpose of this research study was to examine the first year of a systemic change project at a public land grant university and seek to understand first attempts to prepare for and catalyze change. Several questions guided the inquiry:

- How do collaborative efforts impact the preparation process?

- How do participants make sense of change in the first year of the project?

- In what ways do the design criteria influence the development of a change process?

Rationale for the Study

Previous research related to post-secondary change suggests that planned change projects seldom become institutionalized, which is a basic characteristic of enduring change (Curry, 1992). Research that enhances our understanding of beginning moments in the change process is needed. Knowledge embedded in the participants' experience of change may characterize the quality of enduring change in education organizations.

Campbell (1995) suggested that land grant universities concentrating on how to better serve students and society, instead of how to survive, would be focused on change. Moving beyond survival to a higher purpose meant understanding the dynamics of collaboration in a change effort, how different areas in the education system attempted to partner, and how change and learning were two sides of the same coin. My research considered a participant-centered approach to institutional change based on opportunities to expand capacities for change through shared experiences and attempts to collaborate.

Few real examples of systemic change processes are available as guides for innovative change projects, according to Jenlink's (1995) report on educational change systems. This case study explored the dynamics of collaboration and learning in a post-secondary change effort and underscored attempts to create a meaningful change process. There is a compelling need to know more about the process of change so that post-secondary organizations are better equipped to implement change that is enduring.

Jenlink (1995) also asserted that most change efforts are consultant driven, not stakeholder-based and that, "There is limited practical experience in the field [related to systemic change in education]. The absence of a field-based and research-grounded systemic change process presents a major dilemma for educators and change agents [who are] interested in this type of fundamental change" (p. 46). The focus of my research resonated with the need of the field, because it explored a participant-centered process.

This case reflected the efforts of an organizational change process focused on collaboration and learning—valuable knowledge for educational institutions seeking responsive solutions through systemic change. My research was inductive in nature and not generalizable to other populations, but the stories of one project's approach to change may prepare others embarking on similar projects.

Additional knowledge of change as it is characterized by learning will support other education organizations searching for authentic ways to improve the quality and responsiveness of institutions. If change and learning are interrelated as suggested by Campbell (1995) then higher education organizations have an opportunity to positively impact future generations of learners. Revisiting institutional mission and vision requires perspectives on teaching, research, and service viewed differently than current models.

Teaching and learning in the classroom are two characteristics of the traditional university, yet we seldom consider learning as a way to live in higher education. If the future design for higher education organizations is to be

learning-centered, as suggested by one OSU leader, then research on learning and change will augment learning-centered opportunities. Understanding learning and change as a cultural phenomenon may strengthen institutional responsiveness as university populations increasingly diversify. How we learn and how we change are undeniably linked (Curry, 1992).

Although theory-based literature supports the concept of learning in organizations (Senge, 1990), little is known about learning in the change process in higher education organizations. Models of the change process have traditional grounding in sociology and organizational development, but a deeper understanding of participant-created and vision-driven post-secondary change is necessary.

As organizations reflect an environment of global interdependence, it will be essential that post-secondary partnerships in the context of active collaboration be understood and supported. The concept of collaboration provided an integrative element in the FSPE project through the design criteria, potential links with diverse stakeholders, and partnership opportunities with Oregon's community colleges. My study examined attempts to collaborate within the FSPE change process and considered the consequences of collaboration across institutional boundaries. For post-secondary education to effectively cope with the escalation of institutional change there must be additional knowledge about change processes.

<center>Assumptions</center>

In this naturalistic study, researcher-as-participant action and reflection were necessarily blended. My assumptions relating to the research were bound to the project assumptions through the act of participation. Assumptions guided the research endeavor just as assumptions guided the FSPE change project. Consequently, both lists of assumptions were included to highlight the holistic nature of my research approach.

Researcher Assumptions

- Post-secondary education systems are under fire to fundamentally change the way they do business.

- OSU faculty and staff register a high degree of cynicism when new strategic planning, vision and mission projects are introduced. Past experiences with similar projects have seldom produced substantive outcomes.

- The culture of a university is different from other areas of post-secondary education, due in part to the concept of shared governance, and the combined mission of research, teaching, and service. The land grant university was historically established to take technology to the people.

- Perceptions of change are changing—no longer slow and predictable, change is now viewed as swift and continuous.

- Institutional leaders must be active supporters of the change process.

<u>Project Assumptions</u>

- Enduring change can come through the action of people committed to a vision.

- Collaboration across traditional boundaries lowers organizational barriers to change.

- A change process is a learning experience for each individual who takes part, resulting in multiple outcomes in the process.

- An organizational vision has meaning only if each individual can find in it a link to his or her own personal vision.

- Faculty members are essential participants in institutional change, because they are best positioned to effect change. (informal notes, project data, 1995).

<u>Definitions</u>

Shared language and images of participant-constructed experience acted as symbols in this case study, illuminating the processes of change and learning. The following terms were central to the inquiry and reflected the language of project participants as they made sense of change. Definitions were unique to this project, and do not necessarily extend to dictionary versions.

Authentic— "To be authentic is to act, to embody, to engage, and to participate in life" (Terry, 1993, p.107). According to Amitai Etzioni (as cited in Terry,

1993, p. 113), authenticity is present where there is responsiveness and it is

experienced as responsiveness. "To be real" (project fieldnotes, 1995).

Capacity-building—Individuals develop skills and bring talents into the change

process, resulting in added value for the participant and an enriched

university community (project notes, the Retreat, 1994). Learning is

described as increasing one's capacity to take effective action (Kim, 1993).

The process of learning is intimately linked to capacity-building efforts for

individual and institutional enrichment.

Collaboration—Individuals or groups coming together in a shared purpose to

create an outcome beneficial to both parties (project document, 1995).

Critical reflection—An active awareness of any belief. Critical reflection is an

intuitive process and an integral part of transformative learning (Schon,

1983).

Diversity—Diversity refers to groups or individuals bringing difference and

creativity into the project through culture, ethnicity, race, personal and

professional background and ideas (project document, 1995).

Food systems—Food systems is broadly defined to include cultural, social,

economic, ethical, physiological, and human health dimensions, woven

into a global system interconnected for food security. In an expansive

way, food systems touch each of us in our daily lives. The project

explanation of food systems to others was "a plate of food anywhere in

the world and all that had to happen to put the food on the plate" (FSPE

national symposia notes).

Learning—Learning is the process whereby knowledge is created through the transformation of experience, according to Kolb (as cited in Kim, 1993, p. 38). The acquisition of skill or "know-how" and the acquisition of conceptual understanding or "know-why" is the connection between thought and action (Kim, 1993, p.38). *Transformative learning* is learner empowerment, resulting in the ability to reflect on and question basic assumptions (Cranton, 1994).

Sustainable—An enduring process that holds the integrity of the original purpose, and involves a growing body of committed individuals. (FSPE project document, 1995).

Systemic change—A fundamental change in the way the organization does business, in which people do not return to the old way because the new way is more beneficial (FSPE project document, 1995).

Vision—An image of a preferred future. A shared vision is an image of a desired future, shared by a group committed to creating that vision (Senge, 1990). The FSPE project focus the first year was the creation of a vision for the year 2020.

Limitations of the Study

When research centers on the construction of the participants' experiences, which is the case for this inquiry, the issues surrounding interpretation and

description are open to bias. Researcher-as-participant is a role that both strengthens and limits the research process.

As a qualitative researcher, I was interested in the meaning behind the participants' experiences and consequently, I pursued the case by engaging the environment. To facilitate the task of on-the-spot investigation, the researcher becomes the primary instrument in data collection, analysis, and interpretation of the study (Merriam, 1988). If qualitative research is credibly represented it will describe the phenomenological story, and leave the door open for reader interpretation. This naturalistic inquiry was anchored in the philosophy and process of grounded theory research, which supported the dual researcher role and study trustworthiness.

Several limitations were acknowledged in the construction of the case study. The awareness necessary to recognize potential limitations actually may strengthen research outcomes. Study limitations included:

- My role as project assistant and FSPE project team member in the FSPE project provided both insight and potential bias as a deep participant in the experience.

- This case study represented the initial months in a systemic change process at a single land grant university. Consequently, generalization of the research to other sites is not applicable (Marshall & Rossman, 1989). The relevance of this case study for other uses is at the discretion of the reader.

Summary

This chapter included my case study research goals for the FSPE change project at OSU. It also provided a conceptual frame for thinking about change in institutions. First, I presented a sampling of the broader trends and forces for change in higher education. I placed the FSPE project within the broader context of a national FSPE initiative, also providing a description of the local FSPE project including regional forces for change, relevant definitions, and research assumptions. Concepts for how we think about change were presented to highlight the risk and tension surrounding current change efforts. The purpose and rationale for the case study were positioned within the context of post-secondary education.

In the next chapter, I explore the relevant literature base on change and learning in organizations, which supports a conceptual framework for thinking about change in post-secondary institutions. The primary objective of the literature review was to provide a base for understanding the beginning phase of change processes, the importance of learning in organizations, and how change and learning have similar attributes in the change process. The philosophical underpinnings of my research is described and the concept of trustworthiness reviewed. Chapter three describes my choice of research methodology, and data collection, analysis, and interpretation procedures and the experience embedded in the process.

In chapter four the research findings emerged as themes relevant to the rich experience of change observed in this case study. The themes were

expressed through descriptions of key events experienced during the first year of the FSPE project, and the themes were discussed following each key event. Chapter five extended the thematic representations and findings into an interpretive discussion of the study findings. Implications for the FSPE project and OSU emerged from the discussion, and anchored the study in possibilities for application within the bounded experience. It also provided an experiential base for others interested in systemic change projects centered on participant- and vision-driven change. The report concluded with recommendations for future research, and an update of the FSPE project.

REVIEW OF RELEVANT LITERATURE

Change and learning may not be synonymous, but they are inextricably linked (Senge, Kleiner, Roberts, Ross, and Smith, 1995).

Many people no longer believe they can be a source of change. I disagree. One of the greatest discoveries of our current generations is that human beings, by changing the inner attitudes of their minds, can change the outer aspects of their lives (Melrose, 1996, p. 60).

Innovation isn't easy! (Price Waterhouse Change Integration Team, 1995, p. 152).

Introduction

The purpose of this literature review was to establish a framework for change in post-secondary education that conceptually grounded my research study. The review integrated empirical studies, theory-based literature, and popular writing to address and support research themes based in the experience of FSPE project members. Because the participant-driven approach to systemic change in the FSPE project was unusual, few empirical studies were directly relevant. Theory-based literature on organizational learning, the process of change, and systems thinking position the study on the cutting edge of organizational innovation. Both business and education sources related to organizational change theory are included, since much that is known about organizational change emerged from professional fields other than education.

The first portion of the review considers the character of organizations and traditional perspectives of bureaucracy, as well as emerging images of organizations as systems.

Then the character of organizational change is discussed, including the role of change agents, resistance and barriers to change, and innovation in post-secondary institutions.

The next portion of the review considers the beginning process of change and compares several relevant models of process. Several elements of design, such as creating shared vision, are reviewed because of their relevance to the FSPE project. This section also explores the concept of the learning organization as a new approach to the collaborative concept of community in organizations.

Learning and change are central to this research inquiry and to the discussion of change models, so the next portion of the review addresses the character of learning, learning as action, reflection, and transformation, and the place of language in learning and change. Learning in organizations and the concept of capacity-building is explored as a way to find individual value in organizations. Literature on collaborative relationships and the barriers to partnership are also reviewed.

The last portion of the literature review examines the philosophical underpinnings of this research study. A discussion of naturalistic inquiry and research credibility is particularly important to anchor the study in the valid framework of trustworthy qualitative research methodology.

The Character of Organizations

The dynamic of an institution undertaking fundamental change is significantly influenced by entrenched images of the organization. Organizations are complex, human systems, not inanimate objects to be deconstructed as parts in a hierarchical structure. For several hundred years, according to Capra (1996), Western society has lived a paradigm based on a mechanistic and competitive image. These assumptions are now being challenged and changed.

Holistic images of an agrarian society gave way to perceptions of organizations as machinery. Morgan (1986) asserted that the Industrial Age supported the image of the organization as machine: leadership driven, constructed of independent parts, and commonly referred to as a bureaucracy. But the machine image of bureaucracy no longer works (Wallin & Ryan, 1994). The image of wholeness is missing from bureaucratic institutions (Morgan, 1986).

Members of organizations who live the metaphor of gears and cogs, and parts that function separately from the whole, find isolation a common condition. According to Kofman and Senge (1993), fragmentation, competition, and reactiveness have become major problems in institutions because of our success as an industrial culture. Bureaucracy, by its very structure, fragments the information and knowledge flow and obstructs learning in the process (Morgan, 1986).

New metaphors for organizational life are being considered to better characterize its dynamic nature. The shift from a mechanistic paradigm to an organic one explored organizations as brains, cultures, political systems, and

psychic prisons (Morgan, 1986). Individuals and organizations naturally change

in self-organizing ways because of the dynamic nature of organizations

(Wheatley, 1996). Viewed as living systems, not machines, people in

organizations are capable of change, according to Wheatley (1996). Wheatley and

Kellner-Rogers (1996) stated:

> Human organizations are not the lifeless machines we wanted them
> to be. We cannot instruct them with our own plans or visions. Living
> self-organizing systems do for themselves most of what has been
> done to them in the past. They create responses, necessary structures,
> meaning. This is not a description of anarchic systems doing what
> they want free of all direction. It is a description of new roles for
> those of us who want to join in the work of the system. (p. 97)

Systems are whole entities. "The defining characteristic of a system is that

it cannot be understood as a function of its isolated components. . . . The

behavior of the system doesn't depend on what each part is doing but on how

each part is interacting with the rest" (Kofman & Senge, 1993, p. 13).

Conceptually, *systems* maintain the organic quality missing in machine images of

the organization. Kofman and Senge (1993), supported the holistic perspective of

systems by imagining organizations as systems of culture anchored in the

collective memory of the institution. Images of the organization that promote

integration, such as this description, also promote openness to change.

These holistic systems, known as open systems, create fluid patterns that

shape institutional activity (Olsen, 1993). An open system is dynamic, using

resources and energy from the environment for vitality. Open systems are

characterized by a continual flow and change and movement toward order

(Capra, 1996).

In contrast, closed systems such as bureaucracies, are structurally rigid (Olsen, 1993). Closed systems tend to be isolating and move toward disorder and entropy (Capra, 1996). Organizations that do not embrace the thinking of open systems may be unable to connect institutional structure to responsive action. Barriers to communication grow in these organizations because they lack a common language of change within an increasingly diverse environment (Jenlink, 1995).

Organizations shifting away from the hierarchical values and beliefs embedded in the bureaucratic structure, will benefit from systems thinking as they move through the dynamics of change (Banathy, 1991). Systems thinking, although not a formula for problem-solving, offers a holistic approach for understanding complex situations (Wilson, 1995).

In summary, organizations have been characterized as machines with independent parts, not as complex, human enterprises. Bureaucracies are based on the mechanistic image, and sustain a fragmented, competitive, and isolating environment. It is time to move away from old images based on the Industrial Age, and move into holistic images of organizations as living systems.

Organizations and Change

Traditional organizations are being challenged with an uncertain future (Steeples, 1990). As the world rapidly changes, organizations must learn to adapt and grow or be eliminated (Schein, 1993). If organizations are to move into the

21st Century with vitality, a systems approach to organizational change must be integrated into the organization.

Participants in complex social systems lack substantial knowledge regarding the dynamic nature of the system (Jenlink, 1995), and that fact must be considered in the systemic change process. Organizational change is difficult to understand in traditional systems because organizations are social structures, characterized by complexity and the dynamic interaction of individuals and groups (Curry, 1992). Acknowledging the complexity of organizational change is not enough, the nature of the complexity must be clearly understood in order for the change to be institutionally effective (Mintzberg & Westley, 1992).

Even the images of organizational change are changing. The old ways of thinking about change in organizations such as predicting, modeling, and planning, are no longer adequate (Wallin & Ryan, 1994). Change is now seen as continuous, ambiguous, and pervasive in the system, and its speed and intensity may leave people confused (Banathy, 1991).

The new image of change calls for new ways of being in organizations that may decrease isolation and inertia. From this emerging perspective, organizational change is viewed not only as continuous and swift, but fundamentally different (Curry, 1992). This image suggests organizations must be responsive, continuously anticipating changing environments and changing populations. When change is part of a cycle of self-organization and responsiveness, different concepts, images, and ways to be are introduced into organizational life (Wheatley, 1996).

Organizations cannot ignore the shifting perceptions of change and its impact on institutional stability. Enduring change requires something more than swift action, which can also result in failure (Farmer, 1990). In a study by McNeil-Miller (1993), the idea of enduring organizational change required the transformation of values and beliefs of individuals in the system. In this description of enduring change Kotter (1995, p. 67) stated, "Change sticks when it becomes *the way we do things around here,* when it seeps into the bloodstream of the corporate body." Enduring change implies new behaviors based in shared values and social norms. Without that anchor change efforts fade when the pressure for change is removed (Kotter, 1995).

Resistance to Change

It is not surprising to find anxiety and fear among its members when an organization initiates systemic change. Emerging perceptions of change as swift and chaotic may create tensions in organizations where there is need to maintain significant control. People do not always adjust smoothly and easily, nor do they rush to embrace change. "Resistance to change is any attempt to maintain the status quo when there is pressure for change" (Connor & Lake, 1994, p. 133).

When change occurs as an external force, it threatens the self. There is an assumption about organizational life that people hate change and seek to resist it, which freezes any innovation (Wheatley, 1996). Resistance is a reflection of an individual's need to maintain identity, according to Wheatley (1996). Curry

(1992) asserted that the first reaction is to reject change because it challenges the status quo and creates personal discomfort.

Another approach to understanding resistance to change comes from organizational process. Organizational change is both adaptive and disruptive in this view because routines and institutionalization of change offer stability and at the same time reduce the opportunity for change by generating resistance (Amburgey, Kelly, & Barnett, 1993).

In contrast to Amburgey, Kelly, and Barnett's assessment of resistance to change, Antonioni (1994) suggested agents of change should welcome resistance as a signal of participant movement along the continuum of change. This signals an approach to change through learning. Similarly, Isabella's (1990) study suggested that resistance is a cognitive process. From this perspective resistance is not an obstacle, but a cognitive transition. Bridges (1991) applied another meaningful approach to resistance by using grief as a metaphor and resistance as a phase of loss. This was a time when people gave up old ways and had not yet accepted new ways. Carnall (1995) stated:

> While the problems of change are frequently characterized as
> 'resistance to change', the change environment is much more
> complex than that, and can be viewed from a positive or optimistic
> state. In fact, encouraging resistance to change can be positive
> when participants are told no other response is expected. (p. 141)

There are various perspectives on resistance to change and most are valid in specific circumstances, but the last three approaches just mentioned reflect the human side of resistance. If leaders wish to make innovation an enduring part of the organization, they need to listen to their participants. Smoothing over the

conflict and resistance rather than allowing participants to work through the disharmony undermines the participant's ability to change. In a study of university culture, effective change emerged when leaders listened responsively to participant needs in an interactive process (Neumann, 1995).

Change Agents

Fundamental change does not happen by itself, whether in traditional or potentially innovative organizations. Change agents are essential to the change process (Farmer, 1990). They are people in organizations who understand the process, facilitate it, and listen to the concerns of people involved in the change (LaMarsh, 1995). Change agents are committed and charged with the task of changing the status quo (Connor & Lake, 1994). The system may be transformed when leaders and change agents become part of the dynamic process (Owens, 1991) in a responsive and authentic way.

Choosing an individual or group to initiate change is quite important to the success of the change effort. Other people in the system may also effect change if they are given the opportunity to be agents of change, not victims in the process (Aune, 1995). There may be many change agents or one, and the agent's organizational and personal characteristics influence the successful initiation of an innovation (Connor & Lake, 1994).

Change in Higher Education

Change is resisted in higher education organizations (Darling, 1995), although the pressure to change is visibly present. The tradition-laden higher education system is under extraordinary pressure to change the way it does business (Cameron & Tschirhart, 1992). Pressures for change in post-secondary education relate to an ailing society, and what ails society impacts the educational system. Higher education needs to rise above institutional ego, and bring its values in line with its formal values and mission (Astin, 1992). Public and political indicators point to an increasing lack of patience with higher education's self-interest and arrogance, yet it seems in no great hurry to change (Steeples, 1990).

One view toward university change suggested that today's conservative university may change less than society, but the university is neither in decay nor in massive change (Kerr, 1994). In contrast, Darling (1995) suggested the view that today's university is no longer a secure environment, but one that is troubled and uncertain, and yet change is resisted. Participants of academic communities find their attempts to be compassionate in conflict with the competitive environment of the institution, according to Darling (1995). Even university leaders who encourage change, find tension between external demands and internal values, between daily reality and visions of the future, and between innovation and tradition (Campbell, 1995).

Barriers to Innovation

What is known about higher education, is that the tension between the need to change and resistance to change produces unsuccessful attempts to innovate. Higher education organizations are complex systems, and were described in the Baldridge study (1971) as power structures, ambiguous, loose, and shifting due to the pluralistic nature of the system. Curry (1992) implied that innovative change in higher education has not been particularly successful.

Even when innovations surfaced from positive situations, they were not necessarily institutionalized. "Institutionalization has not taken place when the innovation does not show results: thus the innovation has no far-reaching and lasting influence on the organization" (Curry, 1992, p. 11). It is one thing to develop further plans for change in institutions that have a past record of success, but it is completely different to create fundamental change moving outside accepted paradigms (Nevis, DiBella, & Gould, 1995).

Levine's (1980) classic study of change within 14 Colleges of the State University of New York at Buffalo, supported other strong evidence related to unsuccessful innovative efforts. Levine concluded that systemic change was difficult to get adopted, and seldom succeeded in large education organizations. The risk of systemic change in established institutions was greater because old patterns had be replaced with new ones, according to Levine (1980).

Of particular interest to this research is an unsuccessful attempt to implement a systemic quality-oriented innovation at the same education institution as this study. Although the attempt to innovate was considered

successful by internal participants, the bureaucratic system supported the status quo and protected participants from transformative change resulting in an innovation that failed to endure (Olsen, 1993).

Some barriers to change in higher education stem from the fragmented structures mentioned earlier that inhibit the flow of information and community interaction. Cameron and Tschirhart's study (1992) addressed the turmoil in a university due to a radically changing environment. Lack of time and resources proved to be a limiting factor to innovation. When communication systems were strengthened, it greatly improved creative strategies and faculty participation in the venture. Communication was essential to successful organizational change, because increased communication flattened the hierarchy and simplified problem-solving strategies (Parilla, 1993).

Communication is a barrier-breaker, as is active listening, shared behaviors, and learning. These factors positively influence systemic change efforts (Lawson & Ventriss, 1992). Another way to initiate change and lessen barriers is to engage stakeholders far beyond the university where innovation is encouraged at a grassroots level. Renewal may then take the shape of a movement (Palmer, 1992). Through movements, or participant-driven change, higher education renewal encompasses far more than the goals of its specific programs (Chaffee, 1992). "The genius of movements is paradoxical: they abandon the logic of organizations in order to gather the power necessary to rewrite the logic of organizations" (Palmer, 1992, p. 12). This is change rooted in the actions of participants.

Morgan (1986) suggested that creating a movement dedicated to systemic change required an understanding of the change process so that innovation emerged from informed discovery. New processes that supported innovation were needed to match the visions being dreamed in organizations today.

Initiating the Change Process

The key to systemic change in the university is to start the process and commit to the beginning of change (Guskin, 1996). A process design plays an important role in creating the ideal which guides the new beginnings for a future-oriented education system (Jenlink, 1995). " The beginning of a change process starts with an urgent need to face the future of the university, and building the future requires a leap of faith" (Guskin, 1996, p. 35).

The preparation phase for systemic change is like a seed primed for growth. Henry David Thoreau said, "Though I do not believe that a plant will spring up where no seed has been, I have great faith in a seed. Convince me that you have a seed there, and I am prepared to expect wonders" (Thoreau, 1993, title page). *Leaps of faith* have not been common in post-secondary change efforts, but new processes that encourage deep participation and commitment may transform the way we think about change.

Although this study focuses on the *seed* portion or preparation phase for long-term systemic change, it is meaningful to view the change process as an integrated whole. Wallin and Ryan (1994) remind us that organizational systems

are never identical, so models of change are examples not duplications of process.

Antonioni's (1994) change process integrates two classic change processes (Lewin, 1951; Bridges, 1991) and proposes a model embedded in the concepts of learning organizations (Senge, 1990). Antonioni's change process reflects current trends in transformational change in organizations based on shared values, shared vision, and generative learning.

Kurt Lewin's early change model (1951) guided later innovations with an adaptive process. Lewin developed a three-stage fundamental change model that moved individuals or institutions from one point to another point of stability. In the first stage institutional equilibrium was uprooted or *unfrozen*. Then the second state, *change*, was introduced which moved the organization to a new level. Because change was considered fragile and old ways were close to the surface, the third stage of *refreezing* or institutionalizing the process protected change and ensured its sustainability. Lewin's third stage created a new *status quo* . Since unfreezing could be traumatic to a very rigid organization, the cycle was continued to ensure a return to stability. This model assumed a process where change was a necessary stage to go through and the status quo a destination gained with a sigh of relief.

William Bridges (1991) considered Lewin's model but incorporated the idea of transitions in the change process. He suggested that endings and beginnings of change were transitions of grieving old and committing to new patterns. He proposed (as cited in Antonioni, 1994, p. 17-18):

- Letting go of the old situation and familiar patterns

- Experiencing confusion and stress, and

- Commitment to new change patterns

Bridges referred to the in-between stage of confusion as the *neutral zone*. The psychology of people in the workplace was central to this process. Although Bridges' model addressed the human element in organizations, Antonioni (1994, p. 17) stated that. . . "there are no models that examine the connection between organizational learning and change processes." Within Antonioni's assertion is a clue to a sustainable change process found in the learning paradigm.

When process bypasses both learning and vision, and doesn't internalize the concept of change in members of the organization, the process appears to be dysfunctional (Mintzberg & Westley, 1992). Learning in organizations describes a living system, a learner-centered approach to change. This conceptual frame reflects the collaborative involvement of people in organizations who internalize systems thinking, explore mental models and shared vision, and develop personal mastery in a learning environment (Senge, 1990). These attributes of a living system build individual and institutional capacity for new learning. According to Senge (1990), the character of living systems depends on the whole, and organizations are living systems that require holistic views to address the most challenging issues.

Action, reflection, and learning perpetuate a cycle of capacity-building for individuals in organizations in which change is viewed as an energizing and creative process. Senge (1990) suggested that in learning organizations, adaptive

learning for survival and generative learning that enhances the creative capacity, is a cycle of learning that expands capacity.

In Figure 1, Antonioni's (1994) model of a change process offered new ways to think about change as learning in organizations.

Figure 1. Antonioni's Integrated Model for Change

Share Experiences

Phase 1 PREPARATION	Phase 2 IMPLEMENTATION	Phase 3 ADAPTIVE LEARNING	Phase 4 GENERATIVE LEARNING
Change agents: Provide a vision of potential end results. Clearly communicate the goals, purposes, and benefits of the change. Sell change to other formal and informal leaders. Develop change transition teams. Help people identify and deal with their losses. Align people to cooperate in implementing a change.	**Change agents:** Respond to questions clearly. Make sure people receive effective training. Help people with problems that occur in implementation. Provide useful and timely information. Are good listeners. Model conflict resolution.	**Change agents:** Clarify the problem the change is addressing. Facilitate changing the organizational structure to support new changes. Establish the need for continuous improvement. Help others recognize and celebrate successful efforts to implement change.	**Change is processed by:** A shared vision that fosters a commitment to changes. Teams spending time learning why some changes were not successful. People willing to learn and take ownership for how their actions affect the organization. Sharing lessons learned from implementing change across the organization. People willing to change their mind-sets.

Communicate Learning

The model supported individual and systems learning through shared experience and shared vision. Antonioni's process utilized shared learning opportunities to create new learning and to transform perceptions of those

people involved in the process. Shared vision and shared experience build capacity for change in a system, and they are attributes of an organization that learns and continually discovers new learning. The iterative process in Antonioni's (1994) change model represents the generative nature of learning in a change process.

Shared Vision

Shared vision is one component of the Antonioni (1994) process that is integral to this study and to the concept of learning organizations. Vision is defined by Kouzes and Posner (1987) ". . .as an ideal and unique image of the future." Senge (1990) suggested that shared vision is an image of a desired future, shared by a group committed to producing a vision. Building a shared vision creates a sense of purpose that connects people and moves them to fulfill their deepest desires (Senge, et al. 1994). Curry (1992) described shared vision as a practice, not a composed vision statement in an organization. Skill is needed to envision pictures of desired futures that encourage commitment rather than compliance, according to Curry (1992).

In practice, however, shared vision takes various directions. For instance, shared vision has been viewed as an exclusive product of visionary leadership (Kouzes & Posner, 1987; The Price Waterhouse Change Integration Team, 1995). This top-down approach generates a vision from the leader that must gain

acceptance from the participants. This approach to shared vision is much different than a vision of a desired future created in a community effort.

How does this idea of shared vision relate to systemic change in higher education institutions? It encourages restoration of the educational community through shared purpose. "Effective educational reform is a complicated, multifaceted, long-term business involving rekindling of the spirit as well as refilling the coffers of the educational enterprise (Gabelnick, MacGregor, Matthews, & Smith, 1990, p. 9). The spirit of an organization may be imagined and discovered again in the shared visions of its participants.

Learning Organizations

The attributes of a learning organization are desirable for building community in organizations. Dialogue around shared vision enables group members to question assumptions and values, and to increase their capacity for the process of change. The learning organization is a flexible, responsive and creative system. Its flexibility emerges from a shared vision and the common identity of the group (Morgan, 1986). Kofman and Senge (1993) stated:

> When we speak of a "learning organization," we are not describing an external phenomenon or labeling an independent reality. We are articulating a view that involves us—the observers—as much as the observed in a common system. We are taking a stand for a vision, for creating a type of organization we would truly like to work within and which can thrive in a world of increasing interdependency and change. (p. 16)

Some theorists consider the learning organization to be an unattainable and idealized image. Jensen's (1994) study suggested that organizations in which learning concepts were imbedded in the change process confronted time related barriers, and change was not easily accomplished. Fletcher's (1993) study suggested that change is needed to create an organization in which the members contribute collaboratively through leadership, values, and vision.

Constant dialogue with internal and external stakeholders is essential to the process. The attributes of a learning organization represented in Figure 2 are in contrast to the bureaucratic organization (Olsen, 1993).

Figure 2. Attributes of a Learning Organization

Bureaucratic Organization	to	Learning Organization
cause & effect	--	links & patterns
structures	--	processes
inertia	--	rapid response
short range	--	long range
relative values	--	transcendent values
specialization	--	cooperation
objects	--	events & relationships
pieces	--	unity
control	--	self-organization
discreet equations	--	mutual interrelationships
separation	--	interdependence
natural resources	--	human resources
stability	--	resiliency
machine	--	environment
employees	--	stakeholders

The traditional bureaucratic environment is a closed system in which the machine image of independent parts reflects the separation and isolation of its members. The learning organization embodies a responsive system in which interdependence and relationship create trust in the collective enterprise. Olsen's (1993) comparison of the two systems reflects a paradigm shift in thinking toward a more responsive, open system. There is little agreement as to the best way to create a learning organization (Kim, 1993). The effort involved in building a learning organization requires a paradigm shift, a new way of perceiving and interacting in the institution and in society. Fundamental change of this nature impacts our whole culture (Kofman & Senge, 1993).

Higher education's institutions have the potential to be enduring centers of learning if they integrate the concepts of the learning organization into their formal and informal systems. As stated in Brown (1995):

> A learning organization has as its touchstones in inquiry, theory-building, and more and more accurate models of the world. If we were to see our institutions as learning organizations, in which we not only focused on learning in the classroom, but turned all our processes toward inquiry and theory building, we might provide a kind of quality which stemmed from making all voices part of the dialogue about serious learning (collected readings, no page).

The Character of Learning

If higher education organizations are to get serious about using the concepts of learning as a way to do business, then learning must be understood at a visceral level. "Real learning gets to the heart of what it means to be human. Through learning we re-create ourselves" (Senge, 1990, p. 14). Fundamental

change within the organization means transformative learning in individuals (Jenlink, 1995; Mink, Esterhuysen, Mink, & Owen, 1993).

Learning increases an individual's capacity to take precise action (Kim, 1993). In the visceral sense, the experience of learning is described as a racing pulse, chills, the hair standing up on nape of the neck, face flushed, and a knot of tension in the stomach (Brookfield, 1990). Kofman and Senge (1993) asserted:

> Learning occurs between a fear and a need. On the one hand, we feel the need to change if we are to accomplish our goals. On the other hand, we feel the anxiety of facing the unknown and unfamiliar. To learn significant things we must suspend some basic notions about our worlds and ourselves. (p. 19)

Brookfield (1990) described the learning experience in a similar fashion to Bridges' (1991) change process, in which people experience grief, and loss of certainty, and fear the unknown. Such transformative moments of questioning basic assumptions happen frequently during the learning process, according to Brookfield (1990). The learning process is about changing the way we view the world (Senge, 1990). It is also expressed as stumbling over insights and making significant connections (Stevens, 1993).

Learning and change are intimately linked in a generative process and both may be transformational (Brookfield, 1987). In fact, learning is integral to change, and barriers to change could be interpreted as barriers to transformational learning (Nevis, DeBella, & Gould, 1995). Becoming a generative learner requires courage and initiative (London, 1995), and generative learning happens when skills and capacities increase (Senge, et al. 1994).

"Learning change is focused on our assumptions, mindsets, and capacities for systemic change" (Jenlink, 1995, p. 47).

Generative learning embodies a process of action and reflection. The dynamic between action and reflection in an experience, referred to as praxis, is essential to the learning process (Brookfield, 1990). Interaction and reflection create transformative learning (Cranton, 1994). As individuals transform so will the organization and society (Jenlink, 1995). Action-reflection learning is the process of understanding what happened in a given situation so as to improve the next action. In this way individual experience is central to learning (Marshall, Mobley, & Calvert, 1995). Wheatley (1996, p. 96) said, "This world of constant newness requires our consciousness. Our wonderfully human capacity for reflection and learning. . .is a primary contribution we make to all life."

Through language we are able to communicate, learn, and change, because it provides a path of meaning. Jenlink (1995) asserted that individuals and groups engaged in change processes at times experience a frustrating inability to communicate, but through dialogue and common language are able to unlearn old ways and transform. McNeil-Miller's (1993) study of systemic change in the education system confirms the importance of language and capacity-building as conveyors of meaning. The study demonstrated that even with a compelling vision and a desire to create change, the skills needed to communicate and collaborate were lacking. Enduring change was not possible when the change agent could not convey the message of change, and provide learning opportunities to others. Jenlink (1995, p. 51) asserted, "Stakeholder. . .

capacity for creating and sustaining a change conversation through a common change language must be fostered and developed very early in the systemic change process." Jenlink's comment is compelling support for creating a common language of change at the outset of a change project.

The creation of a common language in a change effort builds capacity for change and encourages ownership in the endeavor. "When the language of change becomes available in the common culture, people are better able to name their yearnings for change, to explore them with others, to claim membership in a great movement" (Palmer , 1992, p. 16).

Collaboration

Learning in organizations is an individual and collective experience (Kim, 1993). Encouraging collaboration and organizational learning is about gathering people together to interact (Kouzes & Posner, 1987). In the corporate world, however, building collaborative relationships has been a daunting task, according to Kouzes and Posner (1987).

Collaboration is not a common practice in the institution (Senge, et al. 1994). Participants in hierarchical organizations are not practiced at collaboration (Westley, 1995), although it is increasingly important in higher education organizations to engage in collaborative partnerships (Wilcox & Ebbs, 1992).

The W.K. Kellogg Foundation, through numerous grant-making efforts, sought to catalyze change in land grant institutions through collaboration. The

focus of this research study, Food Systems Professions Education Initiative, was one of their systemic change efforts. The Vice President of Programs for the W.K. Kellogg Foundation suggested the several requirements for the FSPE projects focused on involving diverse group of people in the process of creating a vision based on collaboration. Active partnerships were considered essential to the success of the FSPE initiative (Fugate, 1996).

Collaboration within post-secondary institutions faces significant barriers because of ineffective communication mechanisms in the organization and the autonomous nature of faculty (Wilcox & Ebbs, 1992). Intimacy and shared authority may lower barriers to collaboration, and increase opportunities for learning and effective communication (Senge, et al. 1994). Trust and mutual respect over time (Kouzes & Posner, 1987), and commitment and a willingness to communicate and work together are attributes of a successful collaborative relationship (Mohr & Spekman, 1994).

The need persists for increased collaboration in education organizations to strengthen institutional responsiveness to learners. Johnstone's (1994) study of a higher education institution in partnership with an external partner suggested that collaboration was successful because it emerged from mutual need. Both organizations benefited from partnering, and the result was further collaboration and transformation in both organizations. Partnership, the formal vestige of collaboration, is successful only when teamwork, openness, and trust are integrated into the working relationship. Fundamental change occurs in partner organizations when the partnership is successful (Maes & Slagle, 1994).

The complexity of systemic change in organizations is related to the intimate bond between learning and change and the human conditions surrounding the collective effort. Senge, et al. (1994) asserted:

> Once we start to become conscious of how we think and interact, and begin developing capacities to think and interact differently, we will already have begun to change our organizations for the better. Those changes will ripple out around us, and reinforce a growing sense of capability and confidence. (p. 48)

Guiding Research Philosophy

Qualitative case study research involves the exploration of emerging interactive patterns in a bounded experience, in this case, the first year of a change project at a single university. Naturalistic inquiry, in which meaning emerges from participant experience, supports the interactive nature of the research. "The philosophy of a naturalistic paradigm is defined by place and intent--observing, intuiting, and sensing participant experience in a natural setting. Qualitative research in a natural setting is concerned with process more than outcome, and how people find meaning or make sense of their experience" (Merriam, 1988, p. 17-18).

Naturalistic inquiry attempts to surface social and organizational realities and human perceptions without controlling or reshaping the environment to suit researcher design (Owens, 1991). Research problems that ask "why" or "how" support the idea of multiple perspectives and the emergence of a more holistic image of the experience. When knowledge and meaning are constructed from

data grounded in the environment, the study reflects a high degree of

trustworthiness or study credibility according to Lincoln and Guba (1985).

Trustworthiness is a term that addresses the validity and reliability of a

qualitative study, and has to do with how a study is conceptualized, and how

data are collected, analyzed and interpreted. The rationale of qualitative case

study research is understanding the experience (Merriam, 1988, p. 165-166). Case

study work is made trustworthy through the observer's critical presence in the

context of the occurring event, observation, triangulation of perceptions, and

interpretations, according to Kemmis (as cited in Merriam, 1988, p. 166).

An explanation of validity and reliability is necessary to fully appreciate

the choice of tools I selected to create a credible study. Three areas traditionally

characterize rigor in research: internal validity, external validity and reliability.

Lincoln and Guba (1985) asserted that validity and reliability are quantitative

terms that do not adequately address the philosophical structure of qualitative

research. They change internal validity, how findings match reality, to truth value

or credibility. Credibility is found in the deep description of the experience

embedded in the data. Trustworthiness is found in participant constructs of

reality, how the world is understood in the experience (Merriam, 1988, p. 167).

When the results of a study can be applied to other situations, it is

considered generalizable, and addresses external validity in quantitative research.

This approach is problematic in qualitative case study research, in which the case

is purposeful and examined in-depth (Marshall & Rossman, 1989). In qualitative

research what one learns from a particular situation might be considered

transferable to another situation through intuition and personal experience (Eisner, 1981).

Reliability is also problematic in qualitative case study research, because it refers to the replication of study findings, and each experience is unique in naturalistic inquiry. Lincoln and Guba (1985) use the term *dependability* as a way to describe results that make sense to outsiders, but are not based on duplication.

When the selection of methods and tools are appropriate for the chosen philosophical approach, the outcome is likely to be credible. Qualitative case study research reflects trustworthiness when the concepts of credibility, transferability, and dependability are adequately addressed.

Due to the nature of the research problem and its parameters, I have selected a case study approach for the inquiry. *Case study* is defined as research that investigates a specific event, process, institution, person, or social group considered a bounded system, according to Smith (as cited in Merriam, 1988, p. 9). In a case study format, complex social phenomena remain meaningful and holistic in the research (Yin, 1989). This case study is a bounded phenomenon in a complex social system--the first 12 months of a systemic change project in a post-secondary institution. According to Merriam (1988, p. 33), case study has proved to be particularly useful for studying educational innovations.

Using a case study approach defines the basis for investigation from which the design emerges. Within the context of a case study, qualitative research suggests a theory-building approach to research in which data collection and analysis are contextually grounded in the social setting and represent

multiple realities (Miles & Huberman, 1984). Grounded theory is an inductive

process in which theory emerges through systematic collection and analysis of

data embedded in the phenomenon (Strauss & Corbin, 1990, p. 23). The research

design chosen for this study is the grounded theory approach, utilizing

techniques for data collection and analysis that support study trustworthiness.

Summary

The literature reviewed in this chapter developed a basis for

understanding systemic change in organizations and the concepts of learning

and change central to the Oregon FSPE project. It also created a foundation for

inquiry by exploring the guiding research philosophy used in this case study.

Descriptions of the organization as bureaucracy and system were

considered in this review. The character of organizational change, the role of the

change agent, and barriers to enduring change were discussed. Designs for

change were explored through several classic models of change process and a

new process based on generative learning was introduced.

The character of learning and change was discussed as well as the aspects

of capacity-building in the change process. Emerging from the discussion on

learning and change was the assertion that organizations that learn create

leverage for enduring institutional change. Attributes of the learning

organization offered possibilities to put theory into action.

The final portion of the literature review positioned this study on the philosophical underpinning of naturalistic inquiry and the grounded theory approach to research.

The next chapter extends the philosophical concepts to the specific application. In the context of grounded theory research, I explain data management and analysis methods, and how I interpreted the data using an inductive approach.

METHODOLOGY

The ability to handle complexity with flexibility will be a major factor in the success of the naturalistic researcher. Plan to be flexible (Erlandson, Harris, Skipper, & Allen, 1993).

Introduction

Settling on the appropriate methodology for any research study requires certain knowledge of the environment and the problem before determining what method will produce credible results. Trustworthy research grows out of a thoughtful match between task and method. Three conditions determine the most appropriate research strategy: the type of research question posed; the extent of control an investigator has over actual behavioral events; and whether the focus is contemporary or historical (Yin, 1989).

I followed Yin's (1989) guidelines and my own propensity for inquiry embedded in human experience as a means for thinking about strategy. My research statement reflected a broad approach to the bounded FSPE project experience in its first year. The questions supporting my inquiry were mainly *why* and *how* questions appropriate for case study research (Merriam, 1988). According to Merriam (1988) the less control a researcher has over the environment, the less experimental the inquiry. As a researcher I had little control over the behavioral events in the natural environment of the project. Finally, the focus of my research was contemporary. The end product of my

study was intended to be a holistic, rich description and interpretation of a current phenomenon. These characteristics pointed to the qualitative case study as the most viable research approach, the naturalistic and inductive paradigm.

Because my inquiry explored the experience of preparing for and catalyzing systemic change in a post-secondary institution, I wanted to interpret the data from the source of the experience, the participants. This chapter describes my approach to methodology and the techniques used to strategically support a trustworthy inquiry. The methods and techniques I employed provided a means for relating to the body of data through the data organization and more intensive interpretation process. The chapter also includes the reasoning for my choice of narrative process and the import of telling the participants' story, and reflections on my experience of researcher as participant.

Site and Population

In a bounded case study the description of the site and characteristics of the participants form a foundation for thinking about the research phenomenon. This case study examined a W.K. Kellogg Foundation grant, Food Systems Professions Education (FSPE) initiative, in the College of Agricultural Sciences at Oregon State University, from August 1994 to August 1995. I referred to the national FSPE as the *initiative,* and the Oregon State University FSPE as the *project* to provide clarity and consistency in this report.

At the time of this inquiry, Oregon State University, a land grant institution located in the rich agricultural region of the Northwest, maintained an international reputation as a research university. It was known to be reasonably responsive to constituents external to the institution, according to interviews with community college leaders in the area. The University president, after a long tenure, was beginning a transition into retirement. The Dean of the College of Agricultural Sciences actively supported innovation in the College through the guiding philosophy of the *Agenda* (College of Agricultural Sciences, OSU, 1995). As is true with many land grant institutions, the College was an influential participant in the life of the University.

Access to the population of interest was available to me through a half-time research assistantship in the FSPE project office, in the Office of the Dean, College of Agricultural Sciences. My involvement in the project over an extended period of time was important for developing trust, learning the language of the environment, fading to the background as an observer, and deepening and adjusting perceptions from the participant perspective (Owens, 1991). The assistantship contract covered Phase I of the FSPE project, providing ample time to carry out my research.

I received approval to access information on the project's first year from the project director, who recognized that my contribution on a research level would also support project assessment efforts. All sources of data were fully accessible and there were abundant amounts of data as the project team set about the task of inviting participation.

My research sample was purposive due to the nature of the FSPE project, and included all participants involved in the key events during the first year of the project. Participants included project team members, the advisory group, the Kellogg Foundation symposia participants from OSU, Oregon's community college Presidents' Council representatives, and individuals providing counsel and support to the project. All groups and individuals were referred to as participants in this study, and in specific instances a group, team, or individual was referred to by title.

Project team members included the project director, project assistant, the evaluator, and the dean, who was the principal investigator of the local FSPE project. Daily activities and deadlines were the responsibility of the project director and the assistant. Both individuals were engaged half-time by the project with the knowledge that the project was a full-time commitment. These conditions did not change during the 12-month inquiry. An appropriate description of the project director from my reflective notes indicated that he was "all things to all people." His daily leadership provided the glue that held the project together in those first months. He was regarded by many of his colleagues as a man of great integrity and a professional deeply connected within the University community.

A brief description of my position in the FSPE project is necessary to fully acknowledge my engagement in the participant role. During the 12-month inquiry, I participated both as a full-time doctoral student at OSU and as a research assistant for the FSPE project. Because my research focused on the

project it was convenient and effective to integrate my dual responsibilities, however, blending the roles limited opportunities to stand aside and objectively view the project. In the role of graduate student from another College, I contributed diverse perspectives on change theory and practice during the first year of the FSPE project.

Other members of the project team contributed their support and active advocacy to the FSPE project. The project evaluator, also a leader in the University community, provided on-going counsel and ideas for the development of project design and evaluation.

The local FSPE advisory group included administration and faculty leaders from the University community. The numbers fluctuated over the course of the 12-month study but membership included approximately 16 individuals. This group was characterized by their tremendously busy schedules and their official support for systemic change in the University. During the first year of the project, the advisory group was chaired by either the University president or provost.

The FSPE national symposia participants from OSU's project included external stakeholders in food systems-related professions, several community college presidents, and internal members of the University community. Faculty, project team members, the College dean, and the University provost were frequent attendees at the national symposia. Each of the six symposia were characterized by some new team members. There were varying levels of participation in the symposia teams, and people moved in and out of the

experience gaining some knowledge of the change process but having no way to share it on a consistent basis. Those symposia members returning with new ideas and learning attempted to share their experiences in meetings, e-mail correspondence, and informal conversations.

An Overview of the Research Process

The philosophy underlying the naturalistic paradigm guided my research inquiry and the grounded theory concept (Strauss & Corbin, 1990) characterized the theory-building method I chose for data collection and analysis. Using the grounded theory approach simply meant I drew my data during the 12-month research from the FSPE participant experience as they prepared for change, and I interpreted the socially constructed experience to build theory. I utilized a variety of data sources and a process that unfolded possibilities for building theory out of the meaningful experience with several systematic techniques (Glaser & Strauss, 1967). The theory building approach to research method (Cassell & Symon, 1994) was appropriate for the case study which included the multiple perspectives of the participant experience.

Although this overview of the research process is linear for clarity, the collection, sorting, coding, analysis, and interpretation of data were non-linear. For instance, the combined process of data collection and data analysis led to new data collection and analysis. As the research process moved from data collection into coding, deeper analysis, and interpretation the procedures folded

back into one another. It was within the cyclical process that I could observe the evidence within the broader experience of the project. The process created a contextual frame for meaningful data collection, analysis, and interpretation.

I employed several tools to organize and move the research forward. One technique, constant comparison, was a recursive analytic tool used in the process of qualitative research that supported the grounded theory approach (Glaser & Strauss, 1967). Constant comparison was applied throughout the inquiry with several purposes in mind. The technique involved the comparison of units of data, while constantly seeking similarities and differences within and across the data in a delimiting and filtering process. In the data collection stage I used the method as a filter for data selection and sorting. In the analysis stages I employed a more focused approach to constant comparison, which resulted in the creation of numerous categories of similar data. Then in a delimiting process I collapsed the categories into major research themes. Data were constantly collected and evaluated throughout the length of the study using this approach, and categories of data emerged in significant thematic patterns.

Visual tools were important for the hands-on approach I chose in my qualitative research. I utilized visual color-coding techniques and created a wall-length mural of the research timeline. The visual tools provided a method for being in the whole experience of the data without losing perspective. Patterns emerged that otherwise might have been lost in the individual piles of data.

Triangulation of data supported the case study as a means of overlapping several methods of data collection related to a single event to strengthen the

study's usefulness (Marshall & Rossman, 1989). The triangulation methods I used combined several sources such as interviews, observations, project documents, and meeting notes to confirm and cross-check evidence.

Data Collection

The data collection process spanned a 12-month period, August 1994 to August 1995, of an estimated 18-24 month timeline in Phase I of the FSPE project. Because I was housed in the project office, data collection became a convenient, daily task. Folders labeled with my original research questions became the storage and retrieval area for data in the early months, and computer e-mail folders held all e-mail correspondence passed on to me. The e-mail messages were eventually printed in hard copy and added to the labeled folders. Two additional folders were labeled *Ideas and Questions* and *Miscellaneous* to capture extra possibilities for relevant data.

The study purpose and three supporting research questions guided my first attempts at collection. I sifted and selected anything related to the study questions of design, collaboration, and meaning in the participant experience. The integrative process of collecting data and analyzing the collected data on the spot then directed the type of data I continued to collect. This delimiting technique was necessary to remain focused on my initial research questions and to create a manageable and meaningful body of data. There was a substantive amount and variety of data available during the 12-month study, but not all data

were relevant to my case study focus. Through the filtering process I deleted an estimated 25 % of the total data available for my research .

As the research questions guided how I selected the data, so my reflective journal became a tool for weighing the logic of my decisions. I found it useful to ask the questions that broadened my thinking about observations and data collection (Cassell & Symon, 1994). Questioning the data I selected and connecting it to the events as I observed them and to my research questions, strengthened the selection and sorting process and kept me aware of the researcher and participant roles. For instance, I knew that documents relating to collaboration would be relevant to my question about the impact of collaboration on process, but did the term *collaboration* indicate relevant material? My intuition during the questioning process proved to be a reliable tool for data collection even in the early stages of the inquiry.

I chose to collect and filter data during the 12-month study utilizing the constant comparison tool, but not deeply analyzing the data into categories until all data were represented. This approach allowed me to stay open to new information and questions before moving into the analysis of category identification.

Data collection sources consisted of interviews, researcher reflective journal notes, meeting notes, e-mail correspondence, and project related documents. I chose those data sources based on the mode of communication used by the FSPE project team and my own desire to document the observed experience in the reflective journal notes. Each type of data offered a particular

view of the 12-month experience which suggested possibilities for data

management. For instance, interviews captured personal, in-depth accounts of

the interviewee's experience and the researcher's questions, while project

documents might capture the official message of the change project. I logged the

data accordingly.

Personal interviews provided focused input for my research. I conducted

four interviews, three within the 12-month period. One interview was postponed

several months to accommodate the retirement of the University president.

Interviewees included two presidents from Oregon's community colleges and

two OSU administrative leaders. The interviews provided both the FSPE project

with assessment information and my inquiry with important raw data.

The interview format consisted of one-hour conversations guided by a list

of open-ended questions for possible but not mandatory use (See Appendix A,

interview questions for the two community college presidents). Interviews were

taped and transcribed or recorded as notes by me to preserve interviewee and

content anonymity. Each informant agreed to the consent form that described the

character of the interview and the boundaries of confidentiality (See Appendix B

for consent form). Informants were identified for interview over the course of the

12-month study. This technique supported the unfolding process of a naturalistic

inquiry and demonstrated the on-going selection, sorting, and analysis inherent

in my study. Interviews offered another perspective on the FSPE experience as a

cross-check in the data gathering process, but they did not constitute the only

source of data for my study.

Meeting notes, both official and informal in nature, proved to be consistent sources of data related to key events during the year. Some meetings elicited personal hand-written notes or the jotting down of brief ideas. For other planned events during the first year of the FSPE project official recorders were employed to document the proceedings. For instance, two major events included in this study, the Retreat and the Celebration, were officially recorded. Personal notes and ideas related to those two events triangulated the data and strengthened the interpretation of the research evidence.

Meeting notes frequently reflected the official activity of the project in the first 12-months and were readily available as data for my study. Meeting and project event notes included: project advisory committee meetings; College of Agricultural Science council meetings with external stakeholders present; FSPE national symposia notes; FSPE project events, as mentioned above; the external FSPE evaluator visit; Community College Presidents' Council meeting. Informal jottings, however, were not as easily obtained so some additional participant perspective was lost.

Formal project documents were easily obtained and generally available to the public. The documents included: the Phase I grant proposal; one-page marketing documents created by the FSPE project team and used to encourage participation by diverse stakeholders of the University; National FSPE marketing documents prepared to inform participants of the national FSPE mission and goals; official letters from the FSPE project. Each of these documents represented a single piece of evidence because the power of the message was expressed in the

document as a whole. Meeting notes and documents together constituted greater than one-third of the relevant data.

Computer e-mail correspondence was particularly useful in my data gathering because the method of communication was swift and easily documented. In some instances the messages were relaxed and conversational and others were of an official nature. The project team used e-mail correspondence as a primary communication tool. E-mail correspondence accounted for approximately one-third of the data I collected. For example, the project team corresponded with the advisory committee and other individuals in the project to call meetings, respond to ideas, and think creatively about the process of change and the future of the project. Correspondence by e-mail was the network link of the national FSPE Initiative and of the 12 participating projects around the nation. The FSPE project directors e-mail network extended to the monthly project director telephone conference calls and meetings at the national symposia, and resulted in e-mail notes related to those meetings.

I utilized the e-mail system for data storage and retrieval in the early months of data collection. E-mail folders were used to identify and sort data by event and date of transaction. I printed a hard copy of each document to be included in the data collection process. Each document included the message, the names of those corresponding, the date, and the subject. In the initial stage of data collection those built-in systems supported the organization of my data, and provided a broad view of the process through the 12-month time period.

My fieldnotes documented the events and relationships of the FSPE project as I observed them. Much of the material was reflective and coded OC for observer comments to separate my opinion from the observation notes. The reflective journal was one more view of the on-going data collection process, and reflected my experience as a participant-observer.

The reflective notes were entered on a weekly basis or when special events marked significant interaction in the evolving process. Fieldnotes constituted the smallest amount of relevant data. I kept the notes brief and focused. Both fieldnotes and interviews constituted less than one-third of the collected data. These notes provided a cross-check with meeting notes, e-mail correspondence, and other sources related to particular events, ideas, or shared concerns. The journal entries were recorded and stored in my computer for ready reference. Reflections in the journal became a cyclical tool in the research process to examine and reflect on events and interactions. It provided a way to monitor my values and beliefs about the bounded case as I participated in the FSPE project and collected data for the study. The reflective journal created an awareness of my position as researcher and participant and it acted as a barometer to balance the data collection process.

In an effort to strengthen my research process I consciously sought multiple sources of data to verify a particularly meaningful event or exchange (See Appendix C for data samples from the Community College Presidents' Council meeting). I employed data triangulation whenever possible. Some examples of data triangulation used in this study are represented in Figure 3.

Figure 3. Triangulation of Data

Event or topic	Sources of data triangulation
Retreat, December 1994	• official retreat document given to each participant • recorder meeting notes from the retreat • handwritten thoughts/ideas from a retreat participant
Celebration, May 1995	• official documents given to each participant • official recorder notes (two recorders) • notes from project team members
Community college meeting, August 1994	• e-mail message from meeting participant • researcher's reflective fieldnotes • official project overview of the meeting
Partnership with community colleges, February 1995	• official letter detailing implications of the community college partnership • interviews with two community college leaders

Data Analysis

After the data collection phase, I reviewed the collected data and considered the relevance of data deleted from the study. With assurance that the body of data was complete, I began the analysis phase of coding, building categories, and allowing patterns and themes to emerge. Data analysis incorporated the comparative tool more intensely. The process was essentially non-linear and required a thoughtful, intuitive approach to analysis and pattern recognition. The development of categories and their meanings linked data to potential hypotheses in a speculative qualitative process (Merriam, 1998). I moved beyond the data to construct categories and to pose questions and speculate on possible links to building theory.

I employed a process where data were analyzed first by coding each piece of evidence, then creating simple one- or two-word categories related to the

content of the coded data, placing the coded data in the appropriate category piles, and speculating on the connections across data units. The categories were then collapsed in a comparison and delimiting process creating broader representations of the data that eventually emerged as major themes in my research.

From a variety of coding techniques available in qualitative research, I chose a coding process suitable for the case study. To manage the body of data in a meaningful way, I used visual techniques for coding the data. I chose a manual process of coding, using colored tabs, dots, and numbers that corresponded to the timeline of the 12-month inquiry, the type of data selected, and the document and piece of evidence as it related to the whole body of data (See Appendix D for the data coding and indexing chart). This process allowed me to mix and match units of data without losing their exact locations in the larger body of material. Each piece of evidence was identified and cut into what was considered the most meaningful unit. Evidence ranged from one sentence to complete documents.

Specifically, I divided the 12-month study into four time periods, each time period representing a specific segment of collected data. Evidence was color-coded with a dot corresponding to one of the four time periods. I coded the data type with five colored tabs that corresponded with interviews, documents, e-mail, reflective notes, and meeting notes. I indexed each full document with a letter corresponding to one of the time periods and then numbered each document. As a piece of evidence in a document was identified, I gave it a unit number. Maintaining a detailed indexing process provided an audit trail for

accessing specific information. The color-coding and indexing process also aided in the visual recognition of patterns not easily noticed when managing large amounts of data.

Manual manipulation and comparison of data in the collection and coding process resulted in an intimate connection with the data that led to integrative thinking. Based on my intimacy with the data, I formulated hunches about category formation before beginning the process of category construction. For example, *learning* was a term frequently expressed in the data to describe the language of change, ambiguity in the change process, qualities of a learning organization, and the concept of capacity-building in the FSPE experience. As I recognized the multiple layers of meaning in the data, threads of speculation surfaced that shaped the category identification and labeling task.

The construction of categories in the analysis phase of my research constituted a hands-on process. I utilized the comparison technique, searching for similarities and differences in the data to identify and label emerging categories. Key words in a piece of evidence became my focus. I jotted key words in the unit margins and they became markers of categories. For instance, *collaboration* was identified as a category in a piece of evidence. I wrote the word *collaboration* in the margin, then wrote *collaboration* on a 5x8 orange file card and placed the unit of datum under the card. As the number of categories increased so did the piles of data under the orange category file cards.

The process was swift at first as obvious categories surfaced, but as I continued to examine the evidence the task became more tedious and

confounding. Would it make sense, for example, to place the term *process* and the term *design* in one category? It appeared they were used interchangeably by participants. I chose to create two categories and to place in a category a piece of datum based on the individual meaning as I interpreted it. At times the datum might logically fit in two or three categories. Under most circumstances I chose one category for the datum that most completely represented its meaning. When I completed the category construction, the floor of my workroom held 25 piles of data categories (See Appendix E for data categories).

One outcome of category analysis was the discovery of data clumping related to specific events during the year. Clumping in a category pile was visible because of the color-coded dots in each time period. For instance, numerous blue dots (time period one) formed in the category *collaboration*, and clustered around the Community College Presidents' Council meeting, August 1994. Those visual connections in the data encouraged me to speculate on emerging patterns related to events held during the 12-month inquiry.

As implications for connection increased between units of data the task of analysis became overwhelming. At that point in the research I created a visual mural the length of my workroom wall to focus speculative thinking related to emerging patterns in the data. The mural represented my research case over the 12-month period.

I divided the mural horizontally into two levels that included FSPE project planned meetings and national FSPE planned meetings. Each meeting in a given time period was identified based on the data, then the name of the activity was

written on a colored sticky note and placed on the mural. The mural became a

playing field for thinking about patterns in the body of data, and it catalyzed the

next deep analysis stage of emerging themes.

The visual display of my research in time periods and planned meetings

was an effective method for managing data during category analysis and

interpretation phases. Some of the sticky note activities on the mural included:

campus visit from a national FSPE participating project; National FSPE staff visit;

advisory committee meetings; Federated Tribes of Warm Springs presentation;

National project directors' conference calls; national FSPE symposia (6);

Community College Presidents' Council meeting; external evaluator visit;

international programs visitor presentation; College of Agricultural Sciences

Advisory Council; project team meetings; College of Agricultural Sciences

workshop; Strategic Planning Committee presentation; community college

student services and administrator presentations; community college

representatives luncheon; Provost's Council; National Deans of Arts and Sciences

presentation; the Retreat event; NASULGC president's visit to OSU; the

Celebration event; outside consultant project visit.

I used the mural as an organizational tool to manage data and to visually

engage patterns in the interpretation process. For example, one pattern emerged

from the mural related to the meeting activity during the year. The level of

activity appeared to lessen significantly in the middle of the inquiry period (first

few months of 1995) and to increase again in the late spring and summer of 1995.

Figure 4 graphically represents the mural on my wall, but it lacks the

visual vitality and complexity that moved the interpretation portion of my

research forward.

Figure 4. Mural Representation of Planned Meetings

Monthly Planned Activities: Local and Kellogg
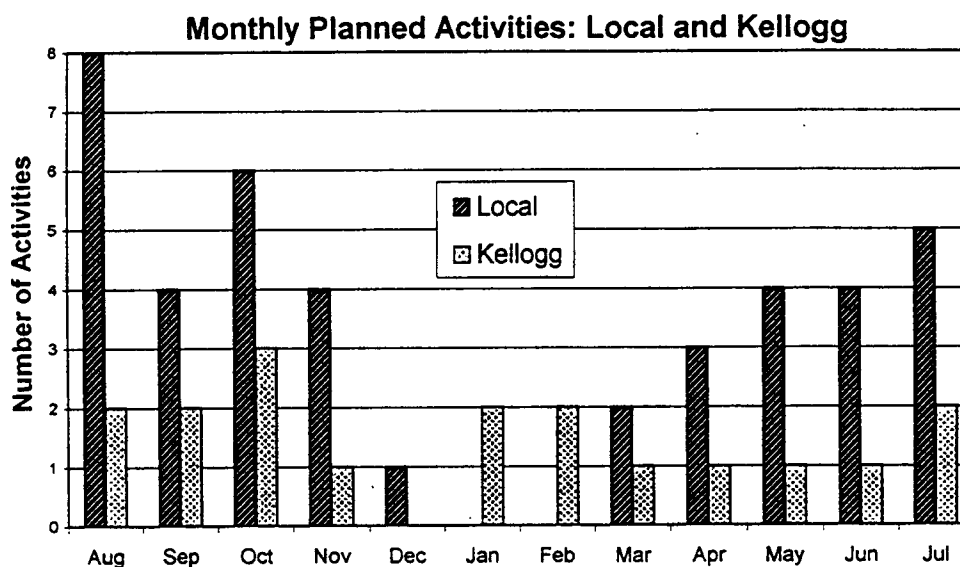
The number of activities listed on this chart represent planned meetings

and conference calls mentioned in the data and should not be considered as

representing all activity during the first year of the project. The project team

invested significant time in informal one-on-one and small group discussions

during the year that are not represented in Figure 4.

I frequently discussed my research with members of the FSPE project and

other colleagues to gain added perspective for my case study. Peer debriefing

was another strategy I incorporated into the research process. Peer debriefing

provided additional proof of internal credibility by cross-checking the systematic

approach of the inquiry (Merriam, 1988). Two colleagues, not engaged in the

project, critically reviewed my approach to the case study. Primary to the three-hour debriefing was a discussion of theme and theory construction. The session was taped and I used it as a reference in the final stages of analysis and interpretation. Sharing the serendipitous moments, the hunches, and the brick walls in my research process with colleagues who were willing to respond with constructive suggestions, moved my research forward significantly. Peer debriefing, from my perspective, is essential in authentic naturalistic inquiry. Research then becomes the social construction of a socially constructed phenomenon—experiential, authentic, and trustworthy.

Immediately following the peer debriefing I intensified the search for similarities and differences in the data. This task involved integrating the smaller categories into compatible larger categories. For instance, the categories of *Time, Uniqueness,* and *Criteria* included small amounts of data which all fit logically into the category *Design.* On each orange category card I listed several criteria for a category, and used those a guides for integrating the categories in the collapsing process.

The confounding moments I experienced in category construction were not present in the comparison, delimiting, and category collapsing of deep analysis. Links appeared in the data that expanded the meaning of the whole body of data in an integrative action. The process felt natural and intuitively correct. Merriam (1988) asserted that looking for patterns demands a mindset that allows for the emergence of connecting ideas. For me, the discovery of

connections provided some of the most beneficial moments in this qualitative research process.

Three categories, *Collaboration*, *Learning*, and *Design* emerged as significant attractors of data in the integration process. Most other categories merged into those three categories with the exception of *Land grant*, *Kellogg Connection*, and some data on *Project Team*, and those I set aside as descriptor categories. It was quite challenging at that point in the process to stay open, to not generalize the material to all change projects or all organizations, and to recognize the ultimate convergence of the data.

The three emerging categories related directly to my original research questions, but the data reflected far more than a few one-word categories. I shifted between analysis and interpretation and considered each of the three categories as they interacted with the patterns emerging on the mural.

Category one, *Learning*, characterized the way participants talked about their experience with the FSPE change project. Building capacity for change was one term for learning which played as a major theme the first year of the FSPE project. For instance, one pattern mentioned several times in the data referred to the *roller coaster ride* which described intense learning moments in the national and local project. As participants prepared for change, it appeared that learning was not only what happened to participants in the FSPE project but how they thought about their experience with change. I created a phrase to represent the thematic interpretation of the learning category—*Learning How to Change.*

A second category, *Collaboration*, characterized the quality of the change design desired by the project team, and described an attribute of active partnership. Collaboration described the concept of collective relationship that would drive the project to a shared vision and catalyze systemic change. I also discovered a dissonant thread in the data related to active collaboration and the formal partnership agreement between the FSPE project and the State's community colleges. Through the thematic representation of the data I traced the patterns of partnership. I created a second phrase to represent the thematic interpretation of the collaboration category—*Collaboration and the Paradox of Partnership*.

The third theme emerging from the analysis related to the category, *Design*. The creation of a change design that incorporated a vision process was the goal of Phase I of the FSPE project. Patterns in the data suggested that as the design developed during the year it represented certain aspects of the participant experience. For instance, four documents referred to as *one-pagers* pointed to the evolution of design, to the character of project scope, and to the diversity of participation at given times during the year. I created a phrase to represent the thematic interpretation of the design category—*The Development of a Change Design*. Figure 5 conceptually represents the three themes emerging from the data related to the FSPE participant experience.

Figure 5. Conceptual Representation of Three Research Themes
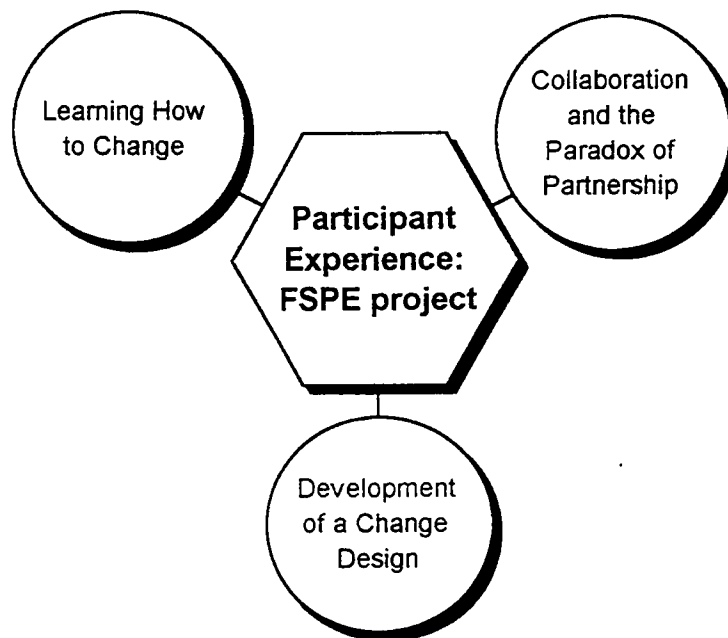
Thematic representations of the categories, *Learning, Collaboration,* and *Design* held the essence of the data. The themes reflected my study purpose and supporting questions. At that point I pondered the experience of preparing for and catalyzing change in the FSPE project, and I wondered how could I communicate the experience in a meaningful way to the reader. The narrative process in qualitative research is integral to the research study and findings, because the data holds the web of meaning constructed by the case participants. My data would be the guide for telling the participants' story in the FSPE project.

The Narrative Process

In this report the narrative process was a natural product of the interpretation phase of my analysis, and it extended opportunities for interpretation as I wrote the narrative. Frequency patterns in the data clustered around four events during the 12-month study. Descriptive comments in the data text also focused on the pivotal nature of those events (See pp. 75-82 for a detailed discussion of key events, themes, and the structure of the narrative process).

I intended to tell the participant story through rich description from the data related to the three themes produced during my data analysis. Creating snapshots of key events during the year was an appropriate vehicle for telling the participant story because it held the integrity of the data intact. I surrounded the drama of key events with thematic discussion and connecting patterns which complimented the key event approach to the narrative account. Through the telling of key episodes in the FSPE project, I make accessible the experience of people constructing meaning in change. "The fluid character of narrative or stories encompasses a capacity for reinterpretation and change. Stories can be retold, reframed, reinterpreted. Because they are fluid, open for retelling and ultimately reliving, they are the repositories of hope," according to Cooper (as cited in Lambert, Walker, Zimmerman, Cooper, Lambert, Gardner, & Ford Slack, 1995, p. 121).

The process of grounded theory also supported this approach to narrative, because it sought the evolving nature of events or happenings to capture why

and how the action changed through the course of the study (Strauss & Corbin, 1990). The narrative approach using key events framed the evolution of the preparation stage for organizational change. This approach to narrative also supported issues of confidentiality and anonymity of the participants without deflecting from the messages conveyed in the themes.

Researcher as Participant

The first year of the FSPE project was documented through researcher-as-participant activity for this study. As a participant and researcher I utilized observation and field journal tools to maximize the position of researcher as instrument. "Researcher sensitivity is essential to grasp motives, beliefs, concerns, interests, unconscious behaviors, customs, and tacit as well as concrete knowledge. The human instrument is the most capable means of interpreting the complexities of human interactions" (Guba & Lincoln, 1981, p. 193).

As a researcher and participant on the FSPE project, my primary role in the inquiry was one of instrument. Meaning was constructed through the dynamic relationship of the environment and its participants, and as an instrument of the research process I interpreted their experience.

In the participant-researcher role there was always a need to define my position in the process. Researcher-as-participant is a schizophrenic activity according to Merriam (1988), because the need to stay involved conflicts with the need to stay unattached in the analysis.

My influence in the project as participant is apparent, and it is acknowledged here to confirm my continual awareness of the fact. The character of the researcher, by his or her presence in the process, influences the research. The awareness necessary to ride the fine line of researcher-as-participant also brings forward an awareness of the research process that enriches the inquiry.

Summary

The objective of this chapter was to describe and support my selection of the methods, tools, and techniques associated with the inquiry, and to share my experience of process as I implemented the qualitative method. Grounded theory and the visual and analytical tools I employed supported the broad philosophical underpinnings of the naturalistic paradigm. Hidden within the analytical process of data collection, coding, category construction, theme emergence, and interpretation were the data related to the participant experience of preparing for change in the FSPE project. My focused role of researcher and participant created an awareness during the research process and magnified my responsibility in project interactions and in the production of trustworthy, useful research.

Through the narrative, the next chapter conveys 12-months of the FSPE project using rich description and key events as vehicles to frame the three thematic representations which emerged from the data analysis. By weaving the three themes into episodes of learning it is possible to tap the deeper meaning in the FSPE change project.

THEMATIC CONNECTIONS AND FINDINGS

Introduction: The Process is the Product

During the first year of the W.K. Kellogg FSPE initiative, the organizers believed that the process was the product to be achieved. Our local FSPE project took the saying to heart, focusing on how to create an inclusive process that resulted in shared participant visions of a desired future for post-secondary education and food systems. The product was embodied in the vision to be realized 25 years in the future. The process evoked first-hand participant experience.

This chapter explores the local FSPE process, both intended and discovered, as the project moved through the first 12 months of its long-term change venture. Interaction among participants in the vision design process elicited patterns of meaning related to capacity-building for the individuals and the institution. The nature of this inquiry supported telling the story of change as it was constructed by the people involved in the process.

My research findings emerged as themes that highlighted major forces moving and delaying the progress of vision design development, a primary Phase I project goal. I begin with a description of the themes resulting from the grounded theory analysis. Because the themes hold little meaning in isolation, they are discussed within the context of four key events experienced during the 12-month inquiry. Preceding a vignette of a key event, is a brief update of the

FSPE project and the research themes. Thematic connections are considered again following each vignette.

Vignettes capture the story of key events, convey thematic messages, and provide rich detail. Each vignette and the thematic discussion that follows progressively unfolds a story of change in the local FSPE project, providing insight into the process and the people who were involved in the first capacity-building months.

Thematic Findings

Three major themes emerged from the research data that directly relate to the local FSPE experience. The themes represent patterns of meaning over the project's first 12 months, and they convey messages important for effective change in the organization. Each theme is significant within the context of the project, but together the themes carry implications for the University and other education change projects in the national FSPE initiative. Exploration of the following thematic representations is a primary focus of this chapter:

- Developing a Change Design

- Collaboration and the Paradox of Partnership

- Learning How to Change

The research questions guiding this study reflected the thematic findings, connecting my research intent with the results of analytical discovery. A review of the initial questions follows:

- In what ways do the design criteria influence the development of a change process?

- How do collaborative efforts impact the preparation process?

- How do participants make sense of change in the first year of the project?

These questions continue to focus the study through the stories of learning and the themes discussed in this portion of the report. Each thematic representation introduces rich background and context for making sense of change as it was experienced by FSPE project members. Themes that emerged in the data analysis are described in the following overview.

Theme One: Developing a Change Design

A primary project goal in Phase I involved the creation of a vision design. Broad guidelines for systemic change, grounded in the two project design criteria, diversity and collaboration, were provided by the funding agency. The design for creating a vision of a shared future and the implementation of that vision rested with the local FSPE project.

Early in the fall of 1994, the project team met frequently to discuss the characteristics of a change process. During those discussions the project team realized that change was a holistic process not separate stages. Preparing for Phase I meant simultaneously preparing for Phase II, and thinking both broadly and specifically about change. This *aha!* experience for the project team moved

the conceptual portion of the design forward and provided new opportunities for learning about change.

When it was understood that the creation of a vision design was essentially about a process for systemic change, the issue of project scope and scale became confusing. The FSPE project was a College of Agricultural Sciences grant with the potential to catalyze systemic change in the University. A question was asked by the project team repeatedly throughout the year, "where do we start the process. . .is it systemic change everywhere at once or a model for systemic change that stays in Ag Sciences?" The fluctuating perceptions of project scope had implications for participant involvement and for the approach used to develop a project vision design. These possibilities both threatened and intrigued some members of the FSPE project and the academic community.

In retrospect, the evolution of design process in the project's first year was one of intuitive action, reflection, learning, and new action, continuously cycling in a process of learning and refinement. Developing a change design, however, suggested far more than a planned progression of actions. The process was unrehearsed, messy, and at times raw. The journey to design was a leap into change, an exciting, frightening, sometimes discouraging, and sometimes energizing experience. It was also an evolution in thinking about systems as a way to create a holistic design that was workable.

As the design evolved so did the design criteria. The two design criteria mandated by the national FSPE initiative expanded to four criteria during the

year based on the project team's experience. The final criteria included: diversity, collaboration, authenticity, and sustainability (See definitions, pp. 14-16).

Interaction with many individuals and groups, both internal and external to the University, influenced the development of design and enriched participant experience. Upon completion, the vision design was an expression of collective learning guided by the design criteria and the experience of project members.

Theme Two: Collaboration and the Paradox of Partnership

Collaboration was one of the design criteria mandated by the national FSPE initiative and integrated into Oregon's project to strengthen collaborative relationships with the State's community colleges. The intent was to establish collaborative links within the University and with diverse groups beyond the University.

Collaboration was also seen as a desirable element in the participant experience and it functioned as an indicator of an authentic process in the project. The development of design involved sharing the message of change and gathering new participants into a process of discovery so that project ownership was the natural outcome. In OSU's project, collaboration was manifest in one-on-one interaction with potential participants to effectively convey the project's purpose to the listener. Meaningful interaction became the mechanism for discovering capacity-building opportunities for individuals interested in the project. Collaboration of this nature was a time-consuming effort.

Collaboration was perceived as paradoxical in both the project's partnership with the State's community colleges and in the creation of design. The primary intent of the project team and its advocates was one of building relationship through process, but time and staffing limitations and cultural barriers between the FSPE project and the community colleges constrained collaborative efforts. These contradictory situations presented significant challenges for sharing the message of change with potential participants, and supporting collaboration and partnership as an element of design based on the integrity of the design criteria.

Theme Three: Learning How to Change

Learning was a key term in the first year of the national FSPE initiative. It expressed individual experience and institutional connection for all of the participating projects. At the sixth national Kellogg FSPE symposium, learning and renewal in organizations was addressed. During one of the daily sessions focused on organizational change, learning was described as central to individual and organizational change. The transformative power of learning was viewed as intimately connected to change in education organizations. These ideas provoked inspired thinking about learning in the academic community which filtered back to the local FSPE project.

Learning how to change evoked an image of individual transformation based in the knowledge gained through experience. OSU's project team

considered this way of knowing to be *capacity-building*— learning that created

value for the individual and enriched the organization. Learning how to change

reflected patterns in individual and group experience as it related to making

sense of the change process and the evolution of a vision design. Although the

creation of a vision was not the focus of this inquiry, its relationship to learning

how to change must be acknowledged. Thinking creatively, thinking *out of the*

box (The Price Waterhouse Change Integration Team, 1995, p. 152) as a product

of envisioning the future also exposed some project participants to innovative

discussions of design which expanded their capacities for change.

The concept of learning in organizations emerged at the national FSPE

symposia through the concept of a *learning organization* (Senge, 1990), perceived

as a new way to be in the workplace. OSU, a traditional land grant institution,

both supported and limited the concept of individual and institutional learning

by the nature of its bureaucratic structure. Learning was perceived as the central

purpose of the university, yet concerns surfaced about developing a strategy for

change focused on learning that could fundamentally alter the way the OSU did

business.

More pointed questions surfaced about the topic of learning in

organizations. One local FSPE participant wondered if "*learning organization* was

a fad term from the business world, and meaningless in education systems." Was

it organizational utopia or an actual possibility? The FSPE project team could not

answer the questions but considered learning in organizations a way to express

individual value and at the same time reflect institutional responsiveness. A

concept of learning that expressed both individual experience and institutional behavior created an approach to the development of a meaningful FSPE project change design.

Key Events

The key event reveals a whole story in a microcosm instead of detailing the entire experience (Wolcott, 1994). Vignettes are the dramatic essence of the key event and the descriptive snapshot of the participants' experience.

In an effort to accurately describe the experience of the participants in the initial phase of the local FSPE change process, I selected four key events in the first year of the project. Using rich description, I attempted to capture the specific experience and later to expand its meaning in a discussion of the research themes. Wolcott (1994) suggested that when the focus was on a specific phenomenon which encompassed broader patterns, the process supported clarity and trustworthiness in the study. How participants constructed meaning from their experience was the essence of the naturalistic inquiry (Merriam, 1988), and the reason I selected the key event as a vehicle for telling the FSPE story.

The four key events described experiences that influenced the direction and character of the local FSPE project. Those key events represented the first deep breaths of organizational change in the FSPE project, and like the first movements of a child in the womb, they were awesome, discomforting, and at times reassuringly natural.

Numerous activities proved to be significant in the first year of the project, but I selected the four key events as they related to research themes represented in the body of data. The key events included:

- Vignette One

  Community College Presidents' Council, August 22, 1994
  Purpose: Taking the project message to potential partners outside the University

- Vignette Two

  The Retreat, December 15, 1994
  Purpose: Sharing a vision design concept with University leadership and external partners

- Vignette Three

  FSPE Symposium, Dallas, Texas, February 27-March 1, 1995
  Purpose: The last of six national FSPE symposia, resulting in a vision experience, serendipitous events, and celebration plans

- Vignette Four

  The Celebration, May 5, 1995
  Purpose: A celebration of local FSPE alumni from the six national symposia, and counsel from them on priorities for gaining commitment, design, and action

Although my research study extended to the end of August, 1995, a full 12-month timeline, the key events most meaningful to the process occurred in the first nine months of the project. The last three months of the project were dedicated to shaping and refining the change design, and continuing to interact with the W.K. Kellogg Foundation on related project matters.

Project Update Prior to Vignette One

Every experience seemed new in the first year of the FSPE change project. A small group of project team members and other interested individuals, both internal and external to OSU, began preparations for change. Preparation during the year would include the development of a vision design, inviting diverse groups and individuals to participate in the process, and learning how to think holistically about change as a process involving vision, implementation, and outcomes. This was not an isolated event, but a process emerging in the heart of a traditional higher education institution.

Wheatley's (1996) thoughts on the self-organizing capacities of humans and organizations, begins to describe the character of participation by those involved in the new change project at OSU. What appeared to be an unplanned, messy process was really experimenting or discovering what was possible. Although messy at times, the natural direction of change is always toward order, according to Wheatley (1996). The first several months of the FSPE project expressed the chaos of learning what change was all about.

During the year, in conversations with individual project directors, and at the FSPE symposia, the director of the national FSPE initiative encouraged individual projects to "take time and reflect on the process, don't rush into action." OSU's project director listened to that admonition and proceeded thoughtfully. A reflective approach to change was unusual in the traditional university system." In the experience of this researcher, quick fix solutions entail thinking about change, but generally not changing in a fundamental way. One

OSU administrator stated, "the quick fix is often viewed as a necessary way to quiet the cries for greater accountability" (fieldnotes, 1994).

The national FSPE staff assumed a supportive role, opening opportunities for discovery at the six FSPE symposia. They supported a safe environment for experimentation by building a national network of land grant institutions involved in the change initiative. In support of the national network of FSPE projects, a council of land grant presidents was established to encourage bold university leadership. The president of OSU, during the project's formative months, understood the advantage of such a network. He suggested that "when contentious areas need reform [in the university], one institution trying to institute changes by itself may be vulnerable. But if there is a general movement for change, it can really happen. There is strength in numbers" (NASULGC Newsline, 1995, p. 5). The council strengthened the FSPE effort with their broad influence, although little happened the first year to demonstrate significant support for the FSPE projects.

During the first national meeting of the 12 participating projects, some OSU leaders considered the present institutional paradigm and what constituted a future desired paradigm. The following display (Figure 6) represented the results of that discussion.

Figure 6. University Paradigms, Old and New

OLD PARADIGM	NEW PARADIGM
Reward structure = traditional scholarship model	Rewards related to a balanced scholarship model: discovery, teaching, creativity, integration, application
Individual, disciplinary efforts are rewarded and encouraged.	Team interdisciplinary efforts are important for solving complex problems and are supported and rewarded.
Teacher-centered instruction aimed at "traditional" students	Student-centered learning for different types of students
We are a credential-oriented institution.	We are a performance-valuing institution.
We aspire to be a comprehensive university.	We aspire to be a university of focused quality programs.
We have a cooperative partnership with appropriate agencies.	We sustain and strengthen cooperative partnerships with appropriate agencies.
Paradigm-shifters are tolerated.	Paradigm-shifters are greatly valued.

The local FSPE project was a College of Agricultural Sciences grant at

OSU, and The Agenda (College of Agricultural Sciences, 1995), a compilation of

the College's vision, mission, and philosophy, complimented the FSPE project

philosophy. The Dean of the College, who created and actively supported *The*

Agenda, considered the FSPE project a natural extension of innovations already in

progress. It was significant that College leadership boldly supported the project

in the early months and continued to encourage team efforts throughout the first

year. The vision statement in *The Agenda* (College of Agricultural Sciences, 1995) is evidence of the supportive philosophy grounding the local FSPE project:

> To insure a richness of ideas and views, we seek and embrace diversity among our faculty, staff, and customers. . . .in carrying out the College's one job (serving the people of the state, nation and world), we form dynamic, adaptive, and variable networks. . . .we collaborate and work as team members for the public benefit. (p. 9)

During the first year, leaders at the University level supported the idea of a more responsive institution, and recognized the merit of an initiative that would catalyze other positive innovations on campus (project meeting notes, 1994). OSU's advisory committee formally supported but did not control the local FSPE project. Considering the mandate for systemic change that defined local and national FSPE project goals, the level of independence afforded the project was unusual. Participant-driven systemic change was an innovative approach to organizational change for both the Kellogg Foundation and OSU.

Thematic Status Prior to Vignette One

Learning How to Change

Three members of the project team met frequently in July and August of 1994 to become acquainted with the FSPE project and each other. We met informally over coffee, discussing the character of change and how to create a change process for a more responsive university. The experience was described as "spongy" by one team member. Individually, we contributed diverse

knowledge and experience to the discussion of organizational change, but no one in the group knew how to create enduring change at OSU. Learning the language, concepts, and tools for effective change processes proved challenging to the project team, as we learned how to change throughout the year.

Two of the six national FSPE symposia occurred before the end of August 1994, and provided some basic information on the character of change, learning organizations, and creating a shared vision. The symposia offered opportunities to learn about change and to share ideas and frustrations with other national FSPE project members. All of the national projects experienced varying levels of excitement and frustration due to the open, fluid nature of the change process, its effect on the change agents, and the creative philosophy surrounding the national initiative. Through the FSPE symposia, the national staff modeled their philosophy by imposing few guidelines on the individual projects and creating learning opportunities for project members during the first year.

Before the FSPE project team could share the opportunity of change with others, they had to shift personal perceptions of change. Learning how to change was first learning about ourselves—learning our personal assumptions, mindsets, and capacity for fundamental change (Jenlink, 1995), and it was anchored in learning a common language. As agents of change, the project team had to expand their capacity for change before offering similar opportunities to others interested in the change effort.

The Development of a Change Design

Some first thoughts about design were documented during the preliminary period of the project in August 1994. The initial position of the project director was to overcome what he believed to be the "ho-hum, that again" reaction to another strategic planning project on campus.

Discussions related to the creation of a change design among participants were stimulating, yet attempts to precisely describe the broad concepts of design elicited frustration. One participant asserted, "we couldn't get our hands around it."

Some of the initial questions surrounding the development of the change design hinted at the substantive issues facing the project team and those people participating in the first activities of FSPE project (project meeting notes, 1994):

- Is the project scope the College of Agricultural Sciences, the University, or global change in food systems and education?

- How do we involve many diverse individuals and groups?

- How do we create energy for change within OSU?

- How do we build relevance and trust with external stakeholders?

In an effort to communicate the opportunities inherent in the FSPE project to diverse groups around Oregon, the *one-pager* was born. Several months prior to the beginning of my study, a one-page document describing the project was distributed. No one knew what the vision process would be, but a one-page

document would invite interested individuals to share in the adventure of envisioning 21st century education and food systems.

The first of four one-pagers, which was distributed to potential participants, described the national FSPE initiative and the local project, and proposed a broad definition of food systems and a culminating vision event. The document described an 18- to 24-month process of gathering committed individuals into the project leading to a futuring conference called *The Assembly*, which would produce a shared vision needed for Phase II funding of the FSPE project (See Appendix F for first one-pager). As evidenced in the one-pager, ideas for design were vaguely defined to keep options open for innovation and to create a collaborative change process with FSPE participants.

The national FSPE design criteria provided direction to the local project in the initial confusion, but making sense of change to share with others was a challenge at the individual level for project team members. The national FSPE design criteria encouraged individual projects to embrace diversity at every level in an inclusive process, and to strengthen collaborative ties with Oregon's community colleges, resulting in a more responsive university through systemic change. It was the aim of the national FSPE initiative to catalyze change, while the local projects assumed change agent roles, sharing the message and creating a vision design for change. Getting to a vision design that addressed systemic change was a complex journey and an adventure into the unknown.

Collaboration and the Paradox of Partnership

The project's first move toward collaboration began with the project team. Although the grant originated in the College of Agricultural Sciences, the team evaluator came from the College of Liberal Arts, and the graduate assistant was recruited from the Western Center for Community College Development (Western Center). These initial moves to collaborate with other areas of OSU profoundly influenced project direction and values by introducing philosophical diversity into the learning process. The project advisory committee, composed of leaders in OSU's academic community, promoted project credibility by their presence and advocacy.

Through the Western Center and its executive director, an invitation was negotiated to present OSU's project to Oregon's Community College Presidents' Council. The FSPE project director, project assistant, and executive director of the Western Center joined the Presidents' Council at a seaside retreat to share the project message and invite Oregon's 16 community colleges to participate as partners in the vision process. This was the first attempt to reach outside of regular partnering channels to invite participation. The action also moved to partially fulfill one of the grant's initial two criteria—building stronger ties with the State's community colleges.

Prior to the community college meeting several informed participants felt the barriers for collaboration were already in place between the two post-secondary education systems. These barriers addressed the competitive attitudes persisting between the State's community colleges and the university system,

and the lack of value found between the two cultures. A working relationship was viewed as desirable, however, by leaders in the competing institutions.

A more pessimistic project member noted, "Community college presidents will feel forced to participate in a partnership [with the FSPE project] that is not mutually beneficial." The FSPE project team wanted to invite participation in the creation of a vision process, a potentially beneficial activity for both groups. The dilemma rested in the competitive nature of the two systems, the lack of trust in a mutually beneficial future, and the ambiguity of the change process. It was understood, two different cultures were entering the discussion.

The project team was on the "learning edge," as one FSPE participant described the situation just prior to the community college presidents' meeting. The team had no idea what was ahead for the FSPE project, but the overall response from the University community was positive. What better time to invite partnership!

Vignette One: Community College Presidents' Council

Site and date: A Northwest coastal resort, August 22, 1994

The room was arranged with the 16 community college presidents, all male, in attendance around a U-shaped table. Invited guests sat in chairs lining the sides of the room. This was the regular monthly Community College Presidents' Council meeting, and funding issues were creating a mildly tense

atmosphere as a priority agenda item. Casual conversations at the U-shaped table frequently turned to gentle ribbing and humor possibly indicative of a close knit community. Competitive agendas, reflecting the autonomous nature of the State's community college leaders were present but subdued during the preliminary moments of the meeting.

The FSPE team were primed for the presentation. Before the project director spoke, he distributed a letter to the group from OSU's president that clarified the team's message: *Community colleges and the FSPE project were a good fit, and university leadership genuinely wanted a working partnership.* We looked out over the Pacific ocean as the project director shared the initial version of the change initiative using computer technology to deliver our message of the future. The project team's mission was clear, but the message of change proved fickle with this group of potential partners. More pressing agenda items left most presidents fidgeting to get on with the "substantive part of the program," according to one member of the Council.

The Council and the FSPE project seemed destined to miscommunicate. A 15-minute time limit was designated for the FSPE project message, but the project director had understood he would have an hour for the presentation and discussion. The chairman commented midway, "you will start losing these guys if you don't get to the main point of where we fit in." Council members appeared at first mildly interested, then quiet, then restless. Some members took notes, but several physically pushed their chairs away from the table during the presentation, anxious to get on with the meeting.

Discussion after the presentation was brief, but amicable. One member asked for an example of an outcome from the project that would be a gauge for success. The director responded by saying "one outcome could be fundamental change in institutional culture—a changed reward system and changed attitudes." Another Council member commented, "such a goal requires jointly held responsibility and reward across the education system, not people on the outside doing the work and people on the inside being rewarded." Most participants seemed to agree with his statement and recognized the implications.

Overall, the project message was received with positive but guarded approval. Our concept of partnership was not specific, except through an invitation to share in the design process and implementation of a vision. A very different invitation. This was the first time OSU had invited the State's community colleges to actively join in shaping a vision of the 21st century for post-secondary education and food systems. Collaboration outside of transfer and articulation issues seemed to be unfamiliar ground for these two groups. Common ground would be more difficult to locate.

In retrospect, the project team agreed that given more time for discussion without the pressure of a long list of agenda items, the presidents might have reacted with greater enthusiasm and initial commitment. One community college president reflected, "We can't afford not to be part of this."

The FSPE team departed the meeting immediately after the discussion, feeling a bit shaken by the lack of response. When the news was received later in the week that the Presidents' Council had agreed to join the FSPE project as a

group—all 16 community colleges—the astonishing news boosted the team's energy and confidence. The State's community colleges seldom participated in unison, believing that the source of their strength came from responsiveness on a local level (project reflective notes, 1994). Two presidents from the Council were chosen to act as liaisons with the FSPE project. Overall, Oregon's community college presidents sent a message of cautious excitement and tentative approval.

Collaboration with the Western Center substantially enriched our initial contact with Oregon's community colleges. Through a link with the Western Center we received beneficial feedback related to the partnering invitation. Individual Council members shared their thoughts over the next several weeks about an active partnership with the FSPE project. Their comments hinted at the push and pull of partnering between Oregon's community colleges and the University. Sources for the following evidence included e-mail correspondence and letters, September, 1994.

One Council member commented, "This could be a very significant project for the future of higher education, and I don't see that we have any realistic choice but to join with the University." Another Council member shared his enthusiasm for systemic change and his skill as a visionary leader. "If all 12 of these Kellogg projects were to make the impact that OSU is visioning, this could be a ground swell that could have a lasting effect on this nation's higher education picture for the 21st century. . .our colleges need to be part of that planning." An interested but hesitant member commented, "Understand our cautious attitude, because this requires a leap of faith in making a commitment to

something as vague as *some kind of visioning and planning process* without clarity as to who other partners might be." The previous statement speaks to a lack of trust between institutional cultures, but it also points to the ambiguity inherent in organizational change.

Another comment by a Council member is equally perceptive. "I am so glad to see the land grant institutions taking this opportunity to reexamine their mission. . . .I was losing hope that they would return to their mission of teaching as much or more than research. . .thanks for bringing this offer of a partnership."

Several responses from the University community, relating to community college partnerships, were shared at a meeting following the FSPE presentation to the Community College Presidents' Council. They provided insight into perceptions of partnering between two- and four-year institutions, from the university perspective. One meeting participant looked to the positive side of partnership, "Community colleges are much more aggressive in their programs to meet change. We have much to learn from our community colleges in this area."

Another comment strongly hinted at the barriers to collaboration, "Community colleges are examples of an opportunity to build coalitions and enlist people and institutions in common purposes. On the other hand, diversity [in the process] also can mean having people at the table who we do not know or with whom we've not worked. . .that can be threatening." These comments from both community college and university leaders demonstrated a desire to

collaborate, but a lack of consensus as to how a collective effort might materialize.

It is relevant to this experience that effective partnering requires the "development of trust, openness, teamwork, and early problem identification and solutions" (Maes & Slagle, 1994, p. 80). The August 1994 experience and the feedback from the State's community college leaders provided fodder for catalyzing future attempts to collaborate between these two competing environments.

Thematic Connections

I prefaced this overview of connections with a reminder that the local FSPE project emerged within a higher education system steeped in history and tradition. Patterns of interaction carried all the opportunities and limitations associated in that context.

Themes that characterized the University's FSPE project become evident in the first vignette. Although the research themes are shared as separate issues, they are interwoven into the experience. Learning was the way the project team made sense of the community college partnership experience, and from that experience was generated creatively new perspectives about change processes and collaboration. The most important thematic connection in this key event was the partnership with the State's community colleges.

Collaboration and the Paradox of Partnership

- The local FSPE project initiated and significantly advanced efforts to
  collaborate with the State's 16 community colleges. A formal partnership
  resulted that represented a watershed for future collaborative efforts. No
  process was established, however, to support the partnership. The language
  during the Council meeting carried the familiar ring of educators, but the
  experience was interpreted from different cultural perspectives.

- In an effort to establish communication links with the State's community
  colleges, the local FSPE project inadvertently created a collaborative
  relationship with the Western Center housed at OSU. It is significant that the
  act of reaching out to include external partners in a collaborative effort,
  enriched interaction within the institution.

- Community college leaders may have stepped into an unknown partnership
  for the good of the future of post-secondary education. They perceived the
  move as risky because previous interaction with four-year institutions had
  been frequently ineffective and insensitive. University leaders wanted to
  repair the damage of past interactions, but had no idea how to proceed. Each
  viewed the FSPE project as a slim chance to create renewed relationships
  through a common purpose. Both cynicism and hope characterized the new
  post-secondary partnership and influenced project direction.

- Community college partners clearly conveyed one message: the partnership
  must be mutually beneficial if the community colleges were going to

participate. Community college leaders wanted concrete outcomes that demonstrated the University's intent. The project was prepared to invite participation, but in those first fragile months of the change process there were few definitive answers.

- Leaders participating in the post-secondary partnership were interested, but demonstrated characteristics of over-committed individuals with little time to contemplate or participate in institutional change.

Of lesser importance, is the development of a change design in this key event. Each key event demonstrates, however, the interrelatedness of themes and experience.

The Development of a Change Design

- Pressure for the project to develop a plan of action created more questions than answers. Without a vision design and a strategy for systemic change, the cynicism and impatience visible in the Council meeting persisted. How could the project team create mutual benefit for community college partners? What was the next step in the development of a design based on inclusivity, diversity, and collaboration? The project director chose to answer these questions by remaining patient, providing an open process, and continuing to invite participation amid the cries for immediate strategic action.

- At this point in the project, the creation of a vision design was a vague idea culminating in an event called The Assembly. The path that would engage

people in the process was unclear. We invited the community colleges to actively work with the project in the creation of a design and they were surprised to be invited to participate on such an involved level. Questions in the University community persisted regarding the depth of decision-making allowed by outside sources. According to one OSU leader, these comments were rooted in "post-secondary politics, not an unwillingness to work together."

- Without a concrete design, individual frustration increased. The innovative change process needed to engage participants so that the excitement of the collective effort emerged in a strategic change design.

Learning How to Change

- From the Council meeting experience, we learned that a receptive environment was necessary for individuals listening to a description of the FSPE project for the first time. A receptive environment included adequate time to discuss the issues and listen to the concerns without other priorities pressing the group.

- We learned that people wanted to make a difference. The leaders exhibited a desire to be involved in creating a better education system. Integral to bureaucratic institutions were expectations for being told *the plan*. Learning how to change, in this instance, meant going against conventional wisdom to initiate thinking that led to innovation.

- Based on the results of the Council presentation and the advice from individuals advocating for systemic change, the one-pager document evolved. The second one-page marketing tool, announcing the FSPE project's partnership with Oregon's community colleges, appeared at the end of August 1994 (See Appendix G for one-pager). The document also reflected the broad scope of the national FSPE and the network of universities involved in the collective effort. Sustainability and quality of the world's food and fiber system injected a greater specificity into the scope of the FSPE project.

- We began to understand the concepts of change. Individuals listening to the FSPE message held multiple perspectives and varying levels of knowledge about organizational change and the future. What we shared and what the audience heard as individuals varied and was often confusing. The more the project team experienced change by reaching out to diverse audiences, the more we understood the concepts inherent in an enduring change process.

- With each new connection, the project team understood more profoundly that systemic change meant changing the culture of OSU, the education system, the government, society, and most amazingly, each individual desiring to participate in the FSPE project. Changing a procedure or an operational structure was reasonable. How would the project team and participants change the basic assumptions and values that connected diverse individuals and systems? Learning how to change was a formidable experience.

Project Update Prior to Vignette Two

Between the months of August and December 1994, the FSPE project

shared the message of change with numerous constituent groups and the OSU

community. The project assumed a low key position in an attempt to learn more

about change before committing to a long-term design. Support remained

positive and participants were eager to contribute.

One more item was added to the FSPE design criteria that guided the

project—change had to be sustainable, enduring. This criteria emerged through

the experience of the project team and the substantial efforts involved in

initiating preparations for change. If the process was not sustainable, why

continue?

Just prior to the December 1994 retreat, described in vignette two, the

project one-pager evolved once more to include the concept of scenario planning

as a pathway to visioning and systemic change (See Appendix H for one-pager).

The one-pager described Oregon's land grant and community colleges as

partners in a change initiative that would prepare for the education needs of

students and stakeholders in the 21st century. The concept of building

institutional capacity for responsiveness was introduced into the document. This

marketing tool reflected the team's own learning.

> Although the pace of global change is greater than ever, people
> often do not have training or experience in preparing for the future.
> The [FSPE project] will work with a variety of groups, guiding
> them through *scenario planning* experiences, a technique used to
> create images of plausible alternative futures. . . .Working initially
> with those who already have decided to think actively about the
> future, the project offers practical assistance that builds people's

confidence and allows them to explore alternatives. (FSPE project marketing document, 1994)

The preliminary vision design to be shared at the retreat incorporated ideas from *The Long View* (Schwartz, 1994), a book on scenario building as a systematic way to think about the future. This was a shift away from the original design of The Assembly. The design involved scenario building with small groups of diverse stakeholders that would eventually lead to envisioning a shared future.

Also included in the philosophy of the design was the idea of building capacity or creating value through learning for the individual. Building capacity for the institution would result when individuals brought their unique skills to the decision-making table as willing and creative participants. This concept was shared one-on-one with many of the project participants prior to the retreat, and the overall reaction was positive. Conversations with individuals or small groups proved to be the best communication tool when describing fuzzy concepts such as *visioning a shared future*.

Learning led to change design development in the project's early months. Project team members continued to incorporate information and experience about change, gleaned from the national symposia, into discussions with other advocates searching to find a meaningful process. Other participating projects also expressed concern for institutionalizing the process. This information, which was shared in monthly project director conference calls, encouraged the local project team to pursue a unique path because no one else seemed to have answers to developing a change design.

Signs of learning were evident in the language of change, in creative discussions, and in the confusion inherent in the ambiguous project experience. Some FSPE participants described the unknown in learning how to change from their own experience: "The project is on a learning curve, evolving by the day," or "muddling is important to what we do."

For the project team, expanding capacity for change involved making sense of and sharing the message of change. The charge to develop a valid vision design leading to systemic change in the institution could not be realized without this time of *muddling*.

One local FSPE advisory member, just prior to the December 1994 retreat, described the learning experience necessary to create a vision design, "We can't get them [participants] to vision in one fell swoop. To create buy-in from constituent groups we must prepare for participation in the process." Building individual capacity for change was the tool needed to leverage commitment from a broad and diverse group of stakeholders.

The second key event in the first year of the project concerned a gathering of OSU and community college leaders at a quiet country lodge owned by the University. The purpose of the retreat was to create a neutral environment in which the project team could share a draft vision design, and engage leadership in a discussion that would move the project forward. An energetic discussion would be compelling evidence of an active partnership where post-secondary leaders could collectively work to create a desired future.

Until the retreat, the State's community colleges were partners in name only, although the representatives had participated in several project activities. The community college representatives were also invited to participate in a national FSPE symposium in Orlando, Florida, January 1995. Invited guests included among other participants, land grant university and community college presidents, and the W.K. Kellogg Board of Directors. The retreat, held prior to the Orlando symposium, could potentially influence the development of project design and engage the community colleges in the next steps of the change process.

The official partnership letters were exchanged between the Community College Presidents' Council and the FSPE project several months prior to the retreat. For the project team, these months had been full of sharing the project's approach to change with faculty, agricultural groups, external stakeholders, and other land grant projects, and learning about design as a process. An integral part of the local FSPE project was *sharing the message* of change.

During the several months prior to the December 1994 retreat, two more national FSPE symposia occurred providing specific experience in small group vision work, and instruction to the project teams on the dynamics of diversity in the change process. This was a time of deep learning for the project team, and a time to substantially shape the character of the local FSPE project. Local participants were ready for action and wanted a concrete description of the process. They wanted to know where they fit in. The project team had taken time

to understand what change was all about, and now it was necessary to get on with the action.

Participants invited to attend the retreat included the advisory group composed of OSU leaders, two community college representatives from the Community College Presidents' Council, other OSU leaders actively associated with the advisory group efforts, and the project team. The retreat participants contributed varying levels of knowledge and experience in the discussion of change strategy.

Participants were primed on the day of the retreat to receive concrete details about project design. The level of energy exhibited could be illustrated through one advisory member's enthusiastic statement, "we can't even realize yet the potential in this project!"

Prior to December 15th, the project team anticipated the retreat would be a pivotal moment in project strategy. "I have never felt better about the project," commented the project director. Engaging the concept of capacity-building as a vehicle for sustainable change in the university was considered a marker in the design process, along with the scenario-planning strategy. "It felt as though our ideas and feelings about change and collaboration were finally coming together," commented one project team member.

Vignette Two: The Retreat

Site and date: A country lodge, December 15, 1994

The half-day retreat took place in a large meeting room overlooking a pond surrounded by fir trees, truly a Northwest scene. The atmosphere was one of high energy and goodwill as invitees sipped hot coffee, munched pastries, and visited informally. The invitation, sent to the advisory committee and community college Council representatives, suggested casual dress in an effort to lower territorial and cultural walls. Some attendees arrived in suits and others in jeans. Hopeful but uncertain of the group's response, the project team decided to create minimal risk by facilitating the meeting internally instead of enlisting outside help.

Although the project team had been counseled to use an outside facilitator to avoid conflict in the process, it was agreed that outside facilitation would take extra time. Bringing someone up to speed on the project's unique approach to change would be time consuming and difficult to articulate. The project director acted as facilitator and interpreter for the duration of the retreat. Each participant received resource materials, including an article on scenario building, the current version of the project one-pager, and a letter by change strategist, Myron Trybus. Other literature representative of project philosophy was displayed on the side table. The group gathered around the long table in anticipation of a meaningful exchange.

Opening comments were presented by the Dean of the College, as principal investigator of the project. He acknowledged the retreat was pivotal for

moving the project forward, and added, "Scenario planning is about capacity-building that guides the way to vision." Another member energetically added, "The group is primed for dynamic change that is hooked to real life." Energy for change was evident and the retreat group waited excitedly to hear the message.

The project director presented a formal rendition of the vision design strategy based on scenario planning, then used metaphor as a transition into informal discussion. He described an image of a stone breaking the surface of a pond and rippling out in concentric rings—involvement of an ever increasing number of individuals in the process of change.

Small group interaction was at the heart of scenario building, and would be a precursor to creating vision and the implementation of change. Building capacity for change in individuals was another element in the strategy. One retreat member asked, "Is the central plan capacity building? What is it?" Someone else countered, "We can talk about process, but we must get on with it. Time to practice!"

The group felt a growing frustration with the lack of clarity as the conceptual design unfolded. Where were the concrete actions, the next steps specifically stated? They were reminded that "this is a strategy, not a plan, for developing a process. . . . It is the creation of a sustainable learning organization." At one point a project team member said with encouragement, "This retreat patterns the symposia—rising levels of frustration that are eventually resolved!" The group continued to struggle with the conceptual

language to clarify some of the fundamental questions that surfaced in the first moments of the discussion—persistent questions in the project's history:

- Which people do we involve?

- How do we invite diverse groups to participate?

- What is the scope and scale of this project? Is it the College of Agricultural Sciences, the University, higher education, global food systems?

- How do the design criteria integrate into the process?

After some time pondering the concepts of change that substantially raised frustration levels, members began creating images as a means of communicating the ambiguous concepts. One retreat member compared the change initiative to *genes* that determined the character of an individual.

Another member added, "visioning must be both from the heart and the head for that very reason." The image of a *square-root group* reflected the emerging critical mass of committed participants needed to create systemic change.

The project director introduced the image of *spinning tops* as a way to think about small groups spinning with energy and creative ideas as they envisioned the future. Tops spin from an outside energy source, and the project would be the supplier of resources to energize the small groups. In response to the spinning tops metaphor one member commented, " Stakeholders have visions of how they see the future, and we must not worry what those visions are, but provide the tools for scenario building and the language to construct possible futures. Build capacity in those people interested, and understand there

will be risk along the way." Someone else at the table responded, " We don't ask questions of what we want from the small groups. We ask, 'what is your vision?', then give them the tools and let them decide. We add to the energy level and knowledge base, but we don't make the decisions for the group."

Eventually, the *spinning tops* image received mixed acceptance when members considered how manipulative the image might be—power imposed from the outside and not internally generated. However, the *spinning tops* image was also meant as an invitation for retreat members to take deeper ownership in the project—to become sources of energy and connection. In the confusion generated by barriers to a common language and other cultural barriers, this message was lost.

More discussion on the fuzzy character of change and strategic design left this painful exclamation hanging above the retreat group, "We clearly need to make a decision about where we want to go!" At this point the Chair of the advisory committee commented:

> Questions are more important than answers at this point. Build capacity to deal with the uncertainty of the future. Upfront, people will thrash around. The food systems idea was excellent, because it tells us all we need to know about systems. . .the land grant university will change fundamentally. We need to be ready when people's attitudes are ready for change. Internal and external groups separately or mixed. . .try them all. The thinking process is different so give those groups a chance. (Retreat notes, 1994)

Although the retreat members were engaged in the discussion, its value dwindled mid-way through the day. Some attendees moved on to other commitments, while others hung on to the end with less than a satisfied feeling of accomplishment. The group of well-intended leaders felt the frustration of

engaging innovative change as individuals in a traditional system and were unable to fully support the effort. Feedback from one attendee reflected the hope and disappoint of the retreat, "Although the discussion was very productive, the purpose of the meeting was not fully achieved from my perspective. I felt lost many times during the meeting and left not being able to define the strategy for scenario building. How are we going to use scenarios?"

<center>Thematic Connections</center>

After the December 15th retreat, all strategies related to scenario planning faded into the background. The negative outcomes of this pivotal event diffused the expectations of all members involved. No one understood then how much the retreat impacted the future direction of the project, but everyone recognized its failure to connect post-secondary leaders in a collaborative effort to change the education system.

The Development of Change Design

- Sharing our concept of design at the retreat, and the response it evoked, was a critical moment in the project. In retrospect, the project team learned from the confusing and somewhat painful experience. When the process moved forward again after several months of reflection, it was with thoughtful awareness that changed the outcome of the design.

- Our concept of design, although relatively clear to the team, was not clear to the members of the retreat. Scenario-building was an interesting process, but they wanted to know how it really applied to creating a shared vision or to systemic change. Some group members described scenario-planning as a delay tactic in the development of a change design.

- Design ideas introduced by the project team were accepted by the participants but considered incomplete. The ideas did not clearly address the pressing questions of scope, scale, creating ownership with diverse groups, creating systemic change, and defining food systems.

Learning How to Change

- Talking about design required the language of change, and everyone at the retreat held varying levels of knowledge and skill in that area. For instance, the community college representatives actively led vision projects in their colleges and understood the language and the process from their experiences. They suggested we get on with the action. The project team was experiencing the *process as the product,* in which change emerged through the transformative learning experience. No one understood that approach, and at times the team didn't either, it was so foreign to institutional life. Creating shared meaning required time to be in the experience and to reflect on it, time no one in the retreat group could afford to give.

- We learned from our partners that the scope of the project was critical to outcomes. One of the community college presidents defined scope:

  > Starting small is the only way to go. It would be impossible
  > to effect change everywhere at once, so utilize the small
  > pockets of innovation and the people who want to be
  > involved. Possibly start in the College of Agricultural
  > Sciences and let that experience be a guide to University-
  > wide change. (Retreat notes, 1994)

  The group listened to the suggestion but liked the idea of immediate system-wide change. When the focus was systemic, individuals on campus and in the community could, as another retreat member noted, "hook their own vision to the project."

- It may be that the team's desire to leave doors open for innovation and inclusiveness among potential participants slowed the development of design. Change required the time to learn. The difference between another strategic planning session and transformative change was the level of ownership from participants who expanded their capacities for change.

Collaboration and the Paradox of Partnership

- The retreat lasted until late in the afternoon, and in that time the two community college representatives spoke just two separate times. The group listened to their comments but did not elicit substantive advice on change efforts nor did they understand the depth of wisdom relating to organizational change contributed by the community college representatives.

It was difficult to determine if the group's reticence to engage the community college leaders was the result of cultural differences, the general confusion related to systemic change, or the facilitation process. In retrospect, the team concluded that a outside facilitator might have provided neutral ground to move the discussion forward in a mutually beneficial way.

- To have University leadership engaged in a working meeting with community college partners was extraordinary. That interaction alone was transformative. The inability to articulate a concrete action plan and the tense dynamics of partnership shaped a crisis of conversation at the long table December 15th. The ensuing frustration of retreat members stalled deeper discussions relating to next steps in the process.

- Through the retreat experience, formalized partnership and collaborative relationship emerged as two very different phenomena. Both post-secondary organizations recognized the need for collaboration, but the venture also needed to be visibly beneficial. The community college representatives agreed to collaborate when OSU was prepared to communicate the community college role in the change process. Project team members experienced a substantial loss of ground during the retreat related to the partnering efforts, however, that ground may never have been held in the first place. The community college representatives continued to engage in a few project activities, but substantive collaboration was not an outcome.

Project Update Prior to Vignette Three

It was February 1995, and two months had elapsed since the December 15th retreat. This was a time of quiet reflection for the project team. It was a time to receive feedback and reflect on past action, future possibilities, and how committed individual team members were to engaging the future of the project.

Metaphor again created the image for feelings when simple words could not. The project director spoke of "standing back from the easel and considering the broad strokes" of the painting in an attempt to describe his need to reflect on the larger project picture. The questions we asked were direct and probing: What have we learned in the last six months? Do we want to continue with the change FSPE change project? Is this process authentic for us?

Limiting questions surfaced again regarding professional territory, university structure, and the feasibility of fundamental change in the institution. Feedback came in the form of personal advice and silence. University leaders remained quietly supportive, but a fracture appeared in the forward movement of the change process. The project seemed to leak energy.

The project team considered another one-pager, but without a definitive design, except small group scenario-building, the team remained silent. One notion grew clearer as the project team reflected on the present situation, "we cannot do this alone. The project can no longer be just a two-person show." Although team members may not have recognized this pause in the process as learning, it proved to be some of the most powerful learning moments in the evolution of the project design.

University and community college leaders attended the January 1995

Orlando, Florida FSPE symposium, met frequently and compiled a list of mutual

interests between the community colleges and OSU (See Appendix K for

Community College Relationships). "The symposium was really beneficial for

me," commented one community college representative, and "I learned much

about why the State higher education system is what it is today—land grants and

schools of Agricultural Sciences." Although the symposium was considered a

valuable networking experience and quite successful for community college and

university leaders, overall response to the local FSPE partnership was tentative,

according to a symposium attendee from Oregon. One community college

president commented, "That's my problem with the [FSPE] project, I don't know

if I want my staff to spend time bringing the University up to speed."

The project temporarily slowed for several reasons beyond the obviously

disappointing retreat. Professional fragmentation, resulting from limited time

and project staffing, was a concern for the project director as he balanced several

pressing responsibilities against the half-time position of director. Because he

was an extraordinary leader in his own right and primary advisor to the Dean,

his professional time and energy were stretched to meet the demands of other

projects and priorities. For instance, he was the one person who could update the

innovative communication system in the College needed for a key presentation

to the State legislative session which was in progress. He was an effective

problem-solver who modeled responsive leadership, which was evident in the

continual stream of people seeking his counsel. Paradoxically, the leadership

attributes that made him the perfect person to lead a change project also jeopardized his ability to remain focused on the project.

The continual fluctuation of project scope on national and local levels exacerbated perceptions of ambiguity. Leading change for one College was quite different from leading change for a university-wide process. What did systemic change mean? Will leadership support the broader FSPE change project with active advocacy? Flux in project scope added to the overwhelming nature of the project early in 1995. Focus moved away from action, and the team quietly pondered the December 15th retreat and possible next steps.

On a national FSPE level, the symposia continued to provide links to deeper learning about organizational change and forums for sharing among participating projects. The Dallas symposium, February 1995, was the last in a series of six symposia offered to the participating projects. It focused on technology and change, and the attributes of a learning organization. According to symposia team members, a *roller-coaster* pattern of learning surfaced during the series of symposia, . At the beginning of the symposium, the pattern reflected high energy and expectations, bottoming out mid-conference with frustration and confusion, then returning to a moderate level of positive energy and consensus. The team anticipated a similar pattern in Dallas, and still looked forward to new ideas and creativity that might lift OSU's project out of the doldrums. Seven Oregonians represented the Dallas team, including OSU staff, faculty, and several individuals external to the University but connected to agriculture and education.

With the project team in a raw and open state due to the retreat event, the Dallas symposium trip surfaced periods of time the FSPE symposium team referred to as *serendipitous* and *synergistic*. Creative periods occurred where team members experienced, individually and collectively, connections between an independent event and the spirit of the FSPE group. The third key event in this report was organized around a series of three small events that occurred during the larger Dallas symposium experience.

Vignette Three: National FSPE Symposium

Journey to Dallas

Destination and date: Dallas, Texas, February 26, 1995

On a crowded flight to Dallas, Texas, the project director sat next to a young businessman. As they talked about the FSPE initiative and change in organizations, the young man mentioned that he was a member of a team-authored book on organizational change recently published for Price Waterhouse. The book offered descriptive guidelines in the language of change similar to OSU's change project. Although the book, *Better Change* (The Price Waterhouse Change Integration Team, 1995), focused on the corporate world it might have information to anchor OSU's change design. They exchanged business cards, and the Price Waterhouse consultant promised to send a copy of the book as soon as he returned to his home office—a highly improbable offer

given the brief conversation. The project director mentioned to several symposium team members that "this was an extraordinary chance meeting." To find another individual steeped in the language and experience of organizational change just when it was needed, was highly coincidental. Just one solid dialogue on change design seemed to open new possibilities for process and lift the feelings of inertia. A symposium team member who attended the retreat stated [this felt] "like the energy boost described in the spinning tops!" We were experiencing our own metaphor.

A Vision Experience

Site and date: Dallas, Texas, hotel conference center, February 28, 1995

On the last evening of the Dallas symposium, OSU's team met to discuss possible scenarios for post-secondary education, and specifically for the University. Earlier in the day, an inspirational speaker offered her perceptions of a learning organization, and now the team considered those ideas. Could we construct the university of the future as a learning organization? How would new technology change our thinking? How do we consider global concerns? What do we not know that we need to know for this discussion? Team members puzzled over the ambiguity surrounding these questions and the required *leap into the future* necessary to consider the University in a fundamentally different way. One member suggested that new uses of technology might systematically change the function of the university. Another scenario considered the

development of international partnerships not seriously considered in the present environment.

As the team shared these scenarios, positive and negative, the energy in the room seemed to lighten and spin just like the spinning tops metaphor mentioned at the December retreat. Several members moved forward in their chairs leaning into the discussion, and another team member went to the easel to capture the rush of ideas. The discussion moved in a natural rhythm as ideas spilled onto the table and were digested in the collective process. One member upon reflection said that "the experience left no room for self-interest or self-consciousness," the conversation and ideas seemed to flow of their own accord.

Some productive meetings used brainstorming techniques that took on similar characteristics, but that evening was distinctly different. During those energized moments the group *leaped forward* from scenario thinking to envisioning a desired future. Language descriptors noticeably changed from "what do you think about this idea?" to "just imagine if. . .", "I dream about. . ." and "what if we were to create. . ."

The team appeared to think and breathe in unison, listening, pausing, absorbing, and expanding on each possibility. The only interruption came when a member entered the discussion late, and found himself unable at first to connect with the group's energy. No one wanted to leave the room when it was time to adjourn. The group drifted together toward the elevators, savoring an invisible connection.

The Van Ride Home

Site and date: Destination Oregon, March 1, 1995

After a long, tiring flight back to the West Coast, five of the seven team members piled into an OSU van for the two-hour trip back home. Conversation came in bits and pieces as darkness settled on the landscape. Someone mentioned the group visioning experience and said, "something happened there, and I don't think things will be quite the same from now on." Another member suggested that since this was the last symposia of the six, it might be an idea to bring all Oregon symposia alumni together to celebrate the collective experience. "Celebration, that's what we need, that's what this is all about!" Celebration should be at the core of the project—celebrating small successes and project milestones.

In a matter of moments the group plunged into plans for a celebration of endings and beginnings. Symposia alumni would gather to celebrate ending the series of symposia which enriched the local FSPE project and connected people with a shared purpose, and also celebrate the birth of next steps in the vision design. Someone in the back seat turned on the overhead light, and grabbed paper and pencil, and the team created plans for a celebration that best reflected and shared our energy-filled experience in Dallas.

The conversation embodied these thoughts: this event would be based on storytelling, fun, and process. It was time to leave titles and territory at the door, time to play and create together! We had experienced how high energy opened

the door to creativity, and changed individual perceptions within the group dynamic. Was it possible to give our Dallas experience back to the larger group?

With little effort the team moved back into fluid communication. We scheduled a team meeting to solidify thoughts of the night's brainstorming. We discussed building memories, creating value, and expanding individual capacity for change. Remembering the national FSPE director's assertion articulated at many of the six symposia, *Diversity is creativity waiting to happen!*, we explored ways to include diverse groups in the vision process. In one breath we discussed food and games for the celebration, and how to engage the international community in partnering efforts. An external team member excitedly considered partnering the FSPE project with a parallel project he directed. Nothing was out of bounds—all things were possible.

Someone turned off the overhead light just as the van pulled into a neighboring town to release the first of our group. In the darkness, I heard a sigh from the project director that clearly signaled his relief that the project was breathing again. There seemed an element of risk, even recklessness in the coming events, but for the first time the energy reached beyond the project team.

Thematic Connections

Learning How to Change

- The FSPE symposium team from OSU learned that positive energy moved the process forward. Moments of synergy created opportunities for innovative problem-solving and group connection. High energy moments were learning moments experienced in formal symposia sessions and in informal conversations.

- Metaphor continued to express the emotion of learning that ordinary words could not describe. In this sense, the experience of change and learning required a visual language common to the group.

- We learned that envisioning a desired future was a fluid experience, in this case, shared within the OSU symposium team. Several questions surfaced from our informal conversations, and one in particular remained with the group: could experiences of this sort be communicated to others with the same intensity, and would it mean the same if it could be communicated? The team had to experience creating visions of the future to understand it!

- A safe environment and shared purpose were essential conditions for moving the symposium team from scenario discussions to images of the future. The team learned that creating change was more than planning possible futures, it was dreaming a desired future together.

The Development of a Change Design

- There was a *leap forward* in thinking about design after the Dallas symposium. The project design criteria and the attributes of the learning organization dovetailed. We thought about design more holistically, and it included the concepts of shared vision, team commitment, learning through expanded capacities for change.

- As the project team expanded their capacity for change, it became evident that the vision design had to express the desire for an authentic process. In fact, after the Dallas symposium we knew authenticity was a guiding criterion (See Definitions, p. 14 for definition of authentic).

- Project scope remained an ambiguous element in the process and it influenced the ability of project members to move forward with design development.

- A significant limitation to the development of a change design occurred in the spring of 1995. Due to the State legislative session, project leadership and the College of Agricultural Sciences leaders were stretched to meet multiple demands. The collective, creative energy needed to shape a vision design was unavailable.

Collaboration and the Paradox of Partnership

- The essence of collaboration was found within the creative process and the discovery of mutually beneficial images of the future. Collaboration in this sense, did not contain the limiting boundaries of formal partnership, as experienced in the FSPE project, but it contained images of involvement, mutual trust, and respect. Through the three vignette descriptions, active connection became the power in which a conversation between two strangers elicited new knowledge, a dynamic vision experience created deep collective meaning, and a brainstorming session set in motion plans to celebrate the journey toward systemic change.

- The absence of community college partners in vignette three is indicative of the absence of active involvement with the State's community colleges at this point in the FSPE project. Although the project team considered possibilities for future connection, necessary measures to sustain the project energy removed the focus from formal partnership efforts.

Project Update Prior to Vignette Four

The synergy of events generated during the FSPE symposium and van ride home dissipated somewhat upon return to the local project. Formal structures within the University continued to bump against the soft, round possibilities of creative process. At times the project team felt vulnerable, at other

times courageous, knowing that innovation in the traditional system was risky. Although some inertia remained after the Dallas journey, significant strides occurred in design and project outlook.

- The businessman who promised to send his book, *Better Change*, fulfilled his promise and the book arrived with an offer to provide consultant assistance as the project moved into the active implementation of change. Members of the project had been sensitized to the process of change through the series of symposia and the local FSPE project, but they were not empowered with the strategies of change. *Better Change* offered some of those strategies.

- The project director reconsidered the scope of the project based on the experience of the Dallas symposium. During a team meeting several weeks after the symposium he commented, "I threw out the old model of university-wide change to look for pockets of innovation within the university, small groups and individuals already seeking change for personal and professional growth." Then the larger group would create shared vision across the smaller groups. He called this approach, "emerging in the vision." This approach to design process echoed the community college representative's advice to, "narrow the risk by starting with known groups who are ready and willing. . ..don't get too global too soon." The definition of *food systems* continued to confuse participants, but it also provided a vehicle for thinking about change in and beyond OSU.

- *Authenticity* was added as the fourth design criteria. Being authentic was described as meaningful and of value to the participants. The need to be

authentic grew out of participant learning and the reflection in the FSPE experience. If it was to be real, the change process needed to emerge through them. This conviction grew out of the Dallas symposium experience, which reflected an authentic group experience leading to shared meaning.

Reflection continued to play a major role in team process, stimulated by reading *Better Change*. The project team continued to struggle to "define a strategy that could be embraced with confidence and with some assurance that it wasn't reinventing the wheel." At one point early in April 1995, the project director provided a reflective update in a memo to the Dean and project team, listing visible project accomplishments and limitations. He reflected on the use of focus groups, scenarios, a change team to guide implementation, and the importance of stakeholder commitment. The question was asked, "Are we too busy for change, and do we have the capacity for authentic, enduring change?"

Theory continued to be a stimulant for thinking about design and participation. The project team learned from articles on dialogue and learning organizations that an authentic approach to participation in the vision process grew from personal vision. Project team members agreed that if participants could "hook into the group vision with their own vision, it would create enduring change."

Activities prior to the May 5th celebration provided significant support to the project. C. Peter Magrath, President of National Association of State and University Land grant Colleges (NASULGC) visited the University and talked to faculty about the need for systemic change in land grant institutions. He

envisioned education "as a seamless web, broad, inclusive and people-serving."

Magrath shared his vision and supported our FSPE project as a viable path to

university responsiveness. Although the community college representatives met

with Magrath during his visit, no active collaboration with the project resulted

from this session. The project team wanted interaction with the community

colleges, yet had no idea how to create an environment for interaction. Project

members knew collaboration was a two-way effort and it was not happening.

Commitment to the celebration event, planned by the symposium team,

was foremost on the agenda. Some participants expressed their enthusiasm for

"getting together to talk about next steps." The original plans, captured in

moments of intense late-night clarity on the van ride, appeared over-zealous in

the sobering daylight. The symposium team met on campus to reconsider the

celebration format. As a result of those meetings and our past experience at the

retreat, the project team engaged an outside facilitator to initiate the event. This

interaction proved to be a beneficial exchange, focusing the activities and the

project's commitment to authentic dialogue with participants.

<div align="center">Vignette Four: The Celebration</div>

Site and date: The Benton County Fairgrounds, May 5, 1995

Large signs with bright colored dots, flip charts and marking pens, chairs

in circles, and an abundance of food, signaled all who entered the comfortable

meeting room that the day's activities would be engaging. No more talk, talk, talk about vague processes.

The group of 20 symposia alumni and other interested participants convened to recommend to take the project forward or say good-bye to it. Group attitudes were surprisingly positive given the long gestation period of the design process. Participants were firmly committed to the project, sometimes against their better judgment. The group had been involved with the concepts of vision, futuring and dreams of FSPE project throughout the year. They wanted to support systemic change at OSU, but needed to know how to accomplish the task. They supported the project through a willingness to make a difference and to be in relationship with colleagues in the process. The community college representatives were not included in the alumni event due to their heavy professional commitments and the admonition that they would participate when the FSPE project had a concrete strategy (fieldnotes, 1995).

The original plan of wild celebration and storytelling was subdued, but in its place the project team found clarity and determination to expand the project beyond the small group of committed members. Finally, the process was placed in the hands of the attending participants. On this day the project team would participate, listen, and learn.

An outside facilitator, with great efficiency and skill, moved the group through the day-long agenda. One participant stated, "It was hard work, but good to be together again." True to our strategy, the activities included creating words that expressed the essence of symposia experiences, and sharing stories

about learning how to change through the experiences in Olive Branch, Denver, St. Louis, Minneapolis, Orlando, and Dallas. Participants shared the words most meaningful to them, which reminded each person attending that language was both a gift and a barrier to interaction. Those moments of shared memories brought closure to the symposia experiences and reconnected the group to its collective and present purpose.

The attendees expected to gain a sense of project focus, understand unique and distinctive project outcomes, and receive clarification relating to project scope. One of the most clarifying and discomforting messages came from the principle investigator on the project. He acknowledged two challenges facing the project from the beginning moments—scope and process.

Participants were reminded of the "dichotomy of changing the fundamental nature of the land grant university" and the equally important message of initiating change relating to "food systems professions." At the December retreat, food systems was considered a brilliant approach to stimulating change. The dean referred to the principles of *Better Change*, and its role in shaping scope and process in the FSPE project. "It is essential to set the scope intelligently. . .overreach, and it could fail. Too limited a scope, and change might not happen." Then he looked intently at the group and said, "I wish to propose that we define our scope as that of creating a vision for education that should be delivered in 2020 for those embarking on a career in the world's food systems or those already in it. The initiative can be a model from which other parts of OSU may learn."

Energy in the room dropped substantially. This was not the message many of the participants hoped to hear. According to one attendee, "we were seeking a much more comprehensive approach to change," and the message seemed to return change efforts to the College. But one project team member responded, "when we take a step [scope] expands, and we can't create focus if we can't get our hands around it. We need to take on a smaller model now and later take on the university and systemic change."

If the FSPE project was going to act authentically, it had to address the issue of scope in terms of staff time and resources. The team was stretched to the limit with heavy project demands. Moving the effort university-wide without engaging OSU resources was an impossible task.

Even as break-out groups explored connections and barriers for institutional change, it was evident that starting small and expanding change efforts would encompass far more than the College of Agricultural Sciences. Barriers to interaction were present, but potential connections were substantial. Could FSPE project members create systemic change by engaging small groups whose energy rippled out into other areas of the university?

Using concepts from the Price Waterhouse book and the assistance of the facilitator, the group discussed options for next steps in the project. This was the time to integrate the experience of creating a vision, small group process, and group feelings about systemic change, to create a design that would encourage participant ownership on a deep level.

It was a difficult but defining moment in the FSPE project. Although members were disappointed with the decision to *start small,* most people contributed to the collective good. It was a moment of group reflection focused on a vision design and the future of FSPE change efforts at OSU. The final design would be shaped by the day's discussion and the culminating effect of group interaction. One symposia alumnus reminisced, "The Kellogg symposia have helped us learn [about change]," and it was the project director's task again to be the voice for the project again and to transform group thoughts into a change design.

Thematic Connections

- The last steps to vision design had to be the product of participants, a collective effort to understand the underlying questions related to change at OSU. As the May 5th group remembered significant moments of learning at the national FSPE symposia, they were positioned to discuss the hard points of institutional change. The true celebration during the day emerged from the collective work of individuals attempting to make a difference.

- We learned that *scope creep,* defined as the flux in project scope, jeopardized the local FSPE project by creating ambiguity and increasing the pressure on project team members to be everywhere at once. By limiting the change effort to the College, the FSPE project team created a dilemma of participation. When the project scope was redefined to a narrower focus, it *unhooked* some

members of the academic community from their individual vision for OSU

and their perceived opportunity to make a difference. Small numbers of

participants engaged in systemic change required a mechanism to increase

participation, like the ripples of water spreading out in the pond.

- The work of the May 5th group, mostly alumni from the national FSPE

  symposia, demonstrated that the collective threads of increased capacities for

  change supported productive dialogue even when differences and

  disappointment cut deeply. The ability to communicate across difference

  elicited interaction rooted in participant commitment.

- Community college representatives were not included in the May 5th

  meeting. Their absence reflected a fading opportunities for partnership by the

  spring of 1995. The decision to exclude the community college representatives

  was, in part, due to their request to involve them only when the project had a

  viable strategy for concrete action.

Final Update

The final update of my study marks the emergence of a vision design

guided by the four design criteria: diversity, collaboration, authenticity and

sustainability. The final one-pager, actually four pages, emerged first as a draft in

July 1995, and then formally several months later as the official marketing tool

(See Appendix I for draft of Final Change Design, and Appendix J for Final

Marketing Tool). Project scope was once more broadly defined in both food

systems and education, but with advice to stay strategic in the process. The design for creating a shared vision described in the document expressed a strategy and concrete steps for implementation aimed at systemic change in food systems and post-secondary education.

Building capacity for the individual, a central element in the design, was intended to encourage ownership in the change project. Ownership was not evident in the community college partnership, which was further evidence of a lack of systemic connection in the post-secondary system.

Developing a process for change and a vision design was an evolution in learning how to change. The evolution of design also was evident in the marketing one-pagers produced by the project. The one-pagers reflected learning experienced over a period of time, which produced a final design in the last few months of the 12-month inquiry.

During the summer months of 1995 the project team collaborated with several outside consultants to refine the vision design. A consultant from Price Waterhouse visited campus to discuss the attributes of successful organizational change as it was described in their book, *Better Change*. The project continued to sought advice from a national consultant on the process of creating shared vision. His assistance remained central to the conceptual development of the final design. The project team utilized consultant expertise to build capacity in change processes and the management of change.

Images of *spinning tops, concentric rings* and *broad brush strokes* were landmarks of meaning in the design's creation. Images conveyed in quotes were

integrated into the daily life of the FSPE project and defined its essence. The most consistent messages were: "Never underestimate the power of a small group of committed citizens to change the world, indeed it is the only thing that ever has" (Margaret Mead, national FSPE saying from raw data, source unknown). "Diversity is creativity waiting to happen" (national FSPE initiative, 1994). An e-mail message received from another FSPE project stated, "Don't rush. . .whatever is rushed to maturity will surely break down early. . .a beautiful accomplishment takes a long time. . .(personal communication, 1995). These images of process and quality defined our vision of a collective future.

Throughout the summer months of 1995, the design emerged. One attempt to describe and shape the design emerged in the stories of the project's future. Telling the story internalized the process. Communication with the May 5th group and other FSPE participants marked the process of design refinement. There were frequent and creative brainstorming sessions among project team members. The team knew the design would be defined by "small vision groups working together to create shared vision." Through the team's previous experience, we decided to involve professional facilitators for the small group work. The time to learn how to vision was an element incorporated into the design. In a letter to an outside consultant the project director made this statement:

> Faculty are the ultimate change agents, so a visioning process must
> certainly engage them. We understand that a collective vision is
> unlikely until people have learned how to create their own visions,
> so we wish to design a process in which people discover how better
> to talk about the future, how to think about possible futures. . . and

hook their own visions into the collective vision. (personal communication, 1995)

By the end of July 1995 the project team reviewed the issue of project scope and had a timeline for small group vision work. The list of potential participants grew with each brainstorming session. According to one project team member, discussions with OSU leadership, consultants and the members of the Kellogg Foundation were "receptive, supportive, and they understood the design." Flow charts detailing upcoming deadlines were posted along the project office walls.

A document of strategy emerged from this activity detailing philosophy, design components, and the relationship of change to a healthy food system. A futurist consulting with the project expressed his enthusiasm for the design strategy. "Sounds great! . . .I expect this document to be somewhere between Genesis and the Declaration of Independence."

The vision design emerged as: a commissioning conference; small groups visioning over several months; and a common ground conference to share visions and reach a common vision for the year 2020. The definition of group success was described as "shared vision, collaboration, learning as a shared experience, and an expanded capacity for change." Project team discussions described groups as, "not closed cells, but connection points" spawning collaborative partners in a recursive process of visioning and implementation. A project team member commented on the systemic nature of our project:

> Success becomes recognizable when the group begins working on a vision that, if it ripples through the whole organization, can influence the whole university. . .the whole industry. . .to keep the

groups strategic, help them understand that the vision they are seeking is one that, if it were successful, could spread to other areas. Thus, success is a vision that has potential for transformation. The theory is, once you start something [innovation] the values and principles embodied in it are applied in other places. (Personal Communication, 1995)

The past year had been a "huge leap off the cliff" into change, as one FSPE

participant described it. Now the project faced the unknown of vision

implementation, but this time the team had a visible path. One of the project

consultants reflected his satisfaction:

The proposal itself is a wonderful document. Without being corny, I have to admit that I read it with real joy. It is a testament to the unusual nature of this whole project. . . . The spirit of this is experimental. This is organic, not mechanistic. Organic means it operates the way life operates, not the way machines operate. We are brewing an organizational soup in which good things come out. (Personal Communication, 1995)

The last four months of my inquiry focused on the specifics of getting to

design. Although design was central to the task of this FSPE project, much of the

year was a capacity-building adventure for participants who learned how to

change. This research considered the transformative experience of developing a

change design through collaborative interaction and learning. The organic nature

of the process, documented in the previous quote, connected individual lives in a

bold attempt to make a difference through systemic change.

Summary of Thematic Findings

The thematic findings of my research were unique to the FSPE change

project and reflected the perceptions of the participant experience during the 12-

month inquiry. Findings clustered around the three major themes that emerged
from the data analysis and interpretation phases of my research .

Learning How to Change

- Increased capacities for change occurred in the project team as they shared
  the message of change in presentations and through informal interaction with
  others involved in the process. A surge of planned meetings in the fall of 1994
  indicated a high interaction time, followed by a period of decreased activity,
  reflection, and then an emerging openness to new ideas that moved the
  project toward design completion. As the project team learned about change
  and committed more deeply to the process, they became effective carriers of
  the change message and conveyors of an environment that encouraged
  learning and project ownership in participants.

- Serendipitous moments, like the introduction to *Better Change* on the flight to
  Dallas, revealed themselves following intense learning in the project. There
  was a increased level of awareness during those moments, when individuals
  were open to new problem-solving connections. These moments of discovery
  and serendipity influenced project direction and outcome.

- Metaphoric symbols and quotes used by participants in the FSPE project were
  tools that enhanced learning the language of change. Those images and the
  deeper values and assumptions behind the images carried a message which
  embodied the spirit of the FSPE project as perceived by the participants.

Communication through story and metaphor reflected the organic quality of the project, and the way participants found meaning in the experience.

- Learning was the experience of the national FSPE initiative and the local FSPE project, and the way some participants described their experience with change. The FSPE national symposia provided learning moments to individual projects on the process of change, and they encouraged integration of the attributes of learning organizations. The value placed on learning at the national FSPE level influenced the local project to think "out of the box" (The Price Waterhouse Change Integration Team, 1995) regarding ownership in and increased capacity for change in post-secondary education and food systems. In the first year, the process of learning how to change became the product of increased capacity for change in Oregon's FSPE project.

Collaboration and the Paradox of Partnership

- Dissonance existed between the official Community College-University partnership and the concept of active collaboration within the boundaries of the local FSPE project. A working partnership and collaborative relationship contained attributes of trust, mutual reward, and shared values (Mohr & Spekman, 1994). Both post-secondary groups intended to create a working relationship but the barriers to reciprocity and trust were formidable. The desire to actively collaborate was visible in conversation and ideas but not in action. Even a list of opportunities for collaboration created by the two post-

secondary groups at the Orlando national FSPE symposium was not enough impetus to move the official partnership into active collaboration (See Appendix K, for Community College-University Relationship).

- Although the local FSPE project was uniquely defined by its learning experiences and organizational limitations, it benefited from links with the W.K. Kellogg Foundation and other FSPE projects. National interaction among FSPE projects provided credibility beyond local influence and encouraged new innovations—an additional source for creative communication and collaboration. It is unlikely that the local FSPE project would have survived in isolation.

- In an attempt to create a collaborative process for participants aimed at systemic change, the local FSPE project discovered substantial barriers to collaboration. Political, cultural, and structural limitations blocked opportunities to engage deep collaborative efforts. As capacities for change increased and became primary in the process, more opportunities for creative conversations evolved into collaborative links. The final vision design reflected a collective desire for connection as it was described in the design criteria and the vision process composed of small groups working collaboratively toward a shared vision of a desired future.

<u>The Development of a Change Design</u>

- A lack of time and staffing resources substantially limited forward movement

  of the change process leading to vision design. Two conditions in particular

  influenced the local FSPE process:

    --Successful innovation in the university required participant buy-in

    and the development of a long-term design for systemic change, and

    also required time to learn the language of change and interact with

    potential participants.

    --The project team leader modeled the values of inclusiveness,

    collaboration, and diversity present in the design criteria, which was a

    time-intensive leadership approach. This approach to catalyzing

    change encouraged an authentic process. Acting responsively required

    adequate time and staffing support for one-on-one interaction. It was

    paradoxical that the attributes of leadership so desirable in the creation

    of a responsive university environment actually limited the team

    leader's ability to move the FSPE project toward its goal of a more

    responsive university. Modeling responsiveness in the change process

    required a safe environment for experimentation, critical reflection,

    and discovery. The university environment was perceived by some

    FSPE participants as unsafe for experimentation and innovation.

- Design criteria guided the change process in the first year of the OSU change

  project, and provided a reference point during the reflective, expansive

moments of learning how to change. Design criteria reflected project values
and shared ownership. When project team members added *authentic* and
sustainable to the list of project criteria, a new level of ownership emerged
grounded in the team's learning experience. The spirit of commitment
embodied in the criteria moved the project through barriers that might have
proved impenetrable.

- The four one-pager marketing documents described the evolution of a change
  design and vision process in the FSPE project (See Appendices F, G, H, J for
  one-pager FSPE Marketing Documents). Each document visually represented
  a period of time in the development of design, the waffling nature of project
  scope, the character of participation, and the project's expanded capacity for
  change through design.

- The final vision design reflected project values and learning experienced by
  participants. Our project design was dynamic, as if the evolution of design
  experienced throughout the year had no end point. The design also contained
  elements of a learning organization—shared vision, team learning,
  participant ownership, expanded capacities, and the ability to question
  individual assumptions. This outcome was significant because it addressed
  the human endeavor to create meaning in our lives and in the institution. It
  also appeared to be a product of project learning, not an attempt to mimic a
  learning organization.

Project participants involved in the local FSPE change effort frequently
mentioned that they were involved because they "wanted to make a difference."

The project provided opportunities to interact with others in the creation of a desired future that would eventually change the education system. Participants willing to make a difference brought meaning to the process of change, worked to create diverse relationships, and in a collective effort moved the project to a dynamic vision design.

The next chapter focuses on a discussion of these findings. From a conceptual and thematic position, I extend the findings of the project to consider implications for the FSPE project and the University, and possibilities for future research.

DISCUSSION AND IMPLICATIONS

*If we look at any successful human activity, we see that
what led to success was the newly discovered capacity of
people. They came together and invented new ways of
doing something. They explored new realms of ingenuity.
They made it happen by responding in the moment and by
changing as they went along (Wheatley, 1996, p. 74).*

Introduction

Margaret Wheatley's comments, as quoted above, reflect the organic

nature of the FSPE project experience as participants attempted to make sense of

organizational change. Episodes of participant learning during the 12-month

inquiry characterized preparations for change in this land grant university

change project. My research findings emerged from data related to the

experience of project team members and other participants as they embraced the

concepts, opportunities, and risks inherent in the change process.

Three themes emerged from the data analysis portion of my research that

framed the project experience and connected the study findings across the 12-

month period. The research themes represented the experience of building

capacity for change: Learning How to Change; Developing a Change Design; and

Collaboration and the Paradox of Partnership.

In the previous chapter, through the rich description of key events and

discussion of research themes, I described episodes of learning in the FSPE

project at OSU that characterized the barriers and opportunities inherent in the

change effort. A summary of thematic findings followed the key events and demonstrated the importance of the themes for making sense of process and the participant experience (See pp. 137-142 for a Summary of Thematic Findings). Episodes of learning expressed through key events in the FSPE project also emphasized the challenges of collaborative relationship initiated through formal partnership with the State's community colleges.

My case study explored first attempts to prepare for and catalyze institutional change within a participant-centered process at Oregon State University. Little existing research related to participant-centered change in higher education was available, but change theory supported this leading-edge approach. Research studies pertaining to the preparation phase of institutional change carries little of the action and outcomes of a full-blown organizational change implementation, and consequently areas relevant to change preparation may not be considered exciting research topics. This case study, however, focused on preparations for change and expanded the body of knowledge relevant to higher education innovation and collaborative efforts between different areas of post-secondary education. Expanding the knowledge base in these areas increases opportunities for the development of successful organizational change.

The following discussion and implications of my research concentrate on FSPE project efforts to expand individual and institutional capacity for change. Participant learning emerged as a primary motivator in change preparations during the first year of the FSPE project. Learning, as it was defined by the FSPE

project team, was an opportunity to build capacity for change that added personal value and ownership to the change effort. Kim (1993) defined learning as expanding individual capacity to take effective action. Building capacity for change created meaning and momentum for some FSPE project participants which moved the process toward a meaningful design for action. Kofman and Senge (1993) suggested that real learning—developing new capabilities— occurred over time and continuously through the act of connecting theory and practice. As the FSPE project geared up for institutional change, developing new capabilities became the process and a product of participation.

The concept of capacity-building for change emerged throughout the case study data. Some evidence of capacity-building opportunities reflected in the data were expressed as individual learning, the attributes of an organization that learns, and learning the language of change. The experience was one of discovery for both project team members and other participants.

In this chapter, I integrate study findings with conceptual and theoretical explanations of capacity-building and the change process, and expand my interpretation of research themes. The discussion considers three topics based on the supporting questions that guided the case study: making sense of change; the process of change; and collaboration and partnership. Through the interpretation, I discuss implications for the local FSPE project and OSU and suggest opportunities for future research.

Discussion

Higher education organizations are currently affected by the rapid, often confusing pace of change that forces new expectations and challenges on university communities. Because universities are complex systems characterized by the dynamic interaction of groups and individuals (Curry, 1992), change efforts frequently are not institutionalized. Attempts to change the whole system without considering the complex web of systems within the system many times result in unsuccessful change efforts.

This case study examined the first year of a Food Systems Professions Education grant in the College of Agricultural Sciences at a land grant university. Although the project represented a College grant, the intent was to create a change design aimed at university-wide systemic change. Systemic change of this nature would fundamentally change how the university responded in daily institutional life. Levine's (1980) classic case study of 14 Colleges within the State University of New York at Buffalo, demonstrated the importance of understanding institutional complexity in a system-wide change effort, and the difficulties inherent in changing old institutional patterns. In addition to the strong impetus necessary to catalyze systemic change, a meaningful process was needed to engage the system in sustained change.

The climate at OSU reflected increasing cynicism resulting from past unsuccessful attempts to define and change the system. University leadership, however, encouraged change out of a need to create institutional stability and maintain customer responsiveness as budget cuts weakened the environment.

The FSPE project, aware of existing cynicism, sought uniqueness in their approach to change by moving away from the traditional top-down change paradigm and encouraging a participant-centered process.

The participant-centered process formed around participation from those willing to engage in a shared process leading to a desirable future. Their commitment to own institutional change would hopefully emerge through their collective involvement and the shared creation of a change design. There were no experts on change process in the FSPE project, just members willing to risk the unknown territory of change in an effort to make a collective difference in post-secondary education and food systems. The project team and a core of willing participants struggled to understand and communicate the new approach offered in the FSPE project. Through shared learning experiences, such as the four key events described in the previous chapter, members expanded their capacities for change and strengthened the commitment to the FSPE change effort.

McNeil-Miller's (1993) qualitative study of school system change supported the concept of building capacity in change participants for successful institutional innovation. The case findings indicated that enduring organizational change required the transformation of values and beliefs in individuals in the change effort. Failure occurred even when the project had a compelling vision and a desire for change, because there were neither skills nor a mechanism to communicate the change desired. There had been no investment in the expansion of participant capacities for change.

One way to diffuse the complexity surrounding institutional change was to engage individuals in the process. Current literature on systems thinking in education encouraged organizational learning and the concept that fundamental change in organizations resulted from transformative learning in individuals (Jenlink, 1995). The individual was a strategy for successful systemic change and an integral part of the enduring process. Attempts to expand participant capacities in the FSPE project involved individual and shared learning, experienced through planned sessions and as a result of active experimentation and reflection.

Making Sense of Change

One of my research questions guiding the case study considered how participants made sense of change in the first year of the project. Some participants found meaning through the learning opportunities that encouraged increased capacity for change. It seemed that learning and change were two sides of the same coin. Learning for change was a generative learning which created new and different learning opportunities and meaningful action (Senge, 1994).

Some participants struggled with the ambiguity inherent in the concepts of change and others chose to separate themselves from the project until more concrete strategies were in place. Most participants seemed to move from excitement to frustration and back again countless times as they attempted to create a meaningful change process. Evidence of learning the language of change

surfaced in project descriptions, participant conversations, and the visual images and metaphors created to express member learning. For instance, the *spinning tops* metaphor emerged in the December 1994 Retreat meeting as a way to describe the infusion of energy and resources necessary to support small groups of participants engaged in creating a shared vision for the future. The image captured a strategy for the change design when no words were available to describe the effort.

Other evidence of building capacity for change emerged in data patterns and text that were interpreted as learning patterns. One example of increased capacity for change was experienced at the national FSPE symposia as intense learning which emerged from several participant descriptions extracted from project and symposia meeting notes. The phenomenon occurred at 3-day FSPE national symposia sessions held during the year. This learning pattern was referred to as the *roller coaster ride* by symposia participants. It suggested a pattern beginning with high participant energy and expectations, followed by intense learning sessions related to organizational change processes and creating a shared vision. Participants then experienced frustration, confusion, and lower energy, finally leveling out with some resolution and clarity due in part to informal conversations with other symposia participants. The conceptual display (Figure 7) reflects the variation of visceral feelings in these learning experiences.

Figure 7. Learning Rhythm - National Symposium (3-days)
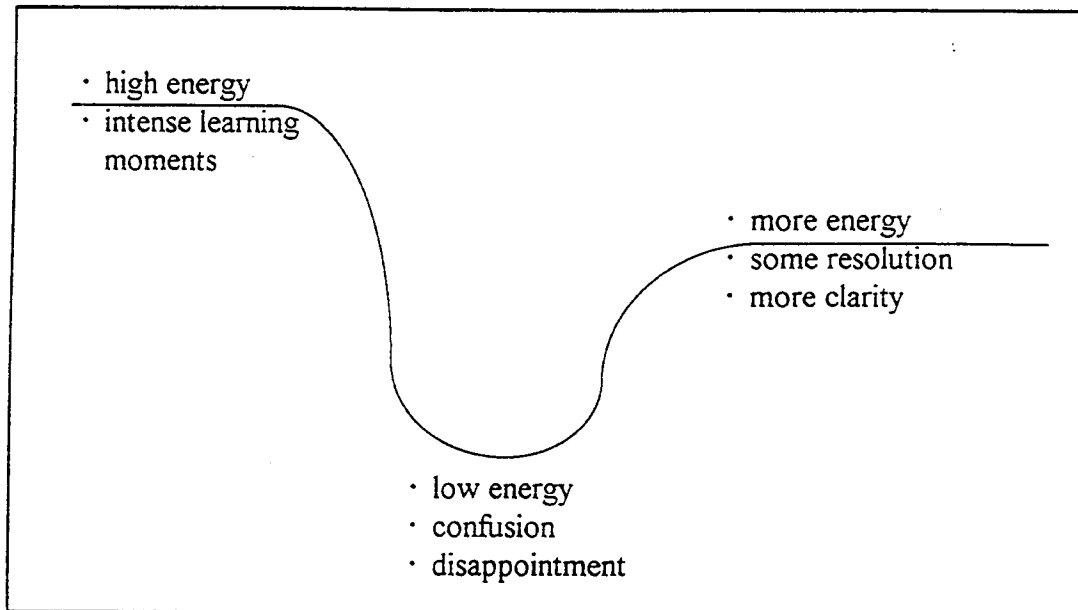
This pattern appeared to be present at most national FSPE symposia, and

it conveyed both the cognitive and visceral experiences linked to expanding

capacity for change. FSPE symposia members were learning about the process of

change, but their experience embodied learning how to change, which involved

their active participation and transformed perceptions. A safe environment for

experimentation and discussion, like the FSPE symposia, was necessary to elicit

the transformative learning frequently referred to as thinking *out of the box*.

Evidence of learning episodes in the FSPE change process, such as the 1994

retreat and the Dallas symposia, reflected expanded capacity for change in

participants as a necessary and valued activity in the FSPE initiative.

The phenomenon of the *roller coaster ride* experienced during FSPE

symposia sessions was supported by learning theory. The learning rhythm,

according to Brookfield (1990), was a series of incremental fluctuations. After the initial enthusiasm of experience there was anxiety and frustration related to the unfamiliar new ways of thinking and acting. But safety was no longer found in the old ways, and the learner stepped forward again to engage in more learning. The visceral nature of learning, described by Brookfield (1990), appeared in the symposia learning pattern.

At times in the case study, experiences of change and learning shared similar characteristics of fear, resistance, frustration, confusion, excitement, and discovery. Learning and change were closely linked in a generative, capacity-building process that could potentially transform the individual (Brookfield, 1990). Although Brookfield's learning rhythm expressed learning patterns experienced at the FSPE symposia, not all learning was filled with frustration and anxiety. The intensity, ambiguity, and risk of the change process might have increased levels of dissonance and encouraged optimal learning moments.

A learning pattern similar to the national FSPE symposia was also noted in the local FSPE project data. The pattern provided further evidence of the opportunities available during the project's first year to build capacity for change. During the analysis and interpretation phase of my research, I searched for patterns in the data using a wall mural of the 12-month study based of the FSPE project and national FSPE initiative (See p. 67, Mural Representation).

The mural spanned the 12-month case study and reflected project team efforts to share the message of change and invite participation. I focused my attention on the high and low levels of planned meetings observed in the mural.

A larger number of planned meetings occurred in the fall of 1994 and late spring of 1995, but planned activity lessened in the winter of 1994. Participants described an intense learning experience and periods of personal reflection in the winter months. In particular, the Retreat, a key event described earlier in the narrative, was viewed as an intense learning experience and a failed attempt to create consensus for a design strategy.

Several participants described an atmosphere of subdued activity in the project during the winter of 1994. My fieldnotes also described this period for the project team as a time filled with pressing professional responsibilities, disappointment, frustration, and individual questions about continuing project participation. During this time project team members asked, "What have we learned in the last six months? Do we want to continue with the FSPE change initiative? Is this process authentic for us?"

Although this learning pattern may have numerous interpretations, it suggests a *roller coaster ride* of learning similar to the national FSPE symposia. High and low levels of activity corresponded to intense learning episodes and personal reflection. These episodes provided evidence of opportunities within the project's first year to expand capacity for change in its members. The dip in planned activities and supporting documentation noted in the data for winter of 1994 signified a deeper learning experience and a resulting need to reflect on the Retreat event. Planned learning sessions like the national FSPE symposia and unplanned learning experiences like the Retreat characterized the varied opportunities to learn how to change. As project members understood more

about the change process through their experience, they were better equipped to create a meaningful change design.

Understanding the character of a change project through the concept of learning holds implications for the FSPE project and the university. When individuals engaged in opportunities to expand their capacity for change, the mechanism was available to make sense of change and deepen personal ownership in the change effort. When participants and the learning experience were the central approach to institutional change, individual capacities expanded, meaningful interaction increased, some new and different bonds formed, and individuals in the change effort discovered more opportunities for learning. This is responsiveness—the goal of the FSPE project and the purpose behind systemic change at the university.

This approach to catalyzing organizational change has further implications for the future success of the FSPE project. Limited staffing and time resources constrained the FSPE project in its move toward a change design. The ambiguous nature of the process and the high level of capacity-building opportunities stretched the project team at times beyond their limits. If active learning and reflection stimulate the process leading to meaningful institutional change, then issues related to adequate staffing and time resources must be addressed by the project in the beginning of the process.

The experience of the local FSPE project was testimony to the ambiguous and time-consuming character of change and learning, however, change efforts

continued to be perceived by some participants as an exciting and somewhat mysterious adventure necessary for the future of higher education.

Although the project offered a relatively safe environment for experimentation with change, the university bureaucracy had no mechanism to integrate the new perspectives and ideas of FSPE project participants. The first year in the FSPE project stirred interest and participation in the change effort, but the project remained a quiet endeavor on campus. If in the future the university engaged a strategy that encouraged learning in the system, the mechanism might then be available to build institutional capacity for change, resulting in an openness to change in the campus community and increased clarity of institutional direction.

The Process of Change

Another question guiding my research focused on the impact of design criteria on the development of a change design process. The four FSPE project design criteria reflecting project values and a commitment to the future included diversity, collaboration, sustainability, and authenticity. The criteria greatly impacted the direction and intent of the FSPE project during its first year, and the criteria provided evidence of learning that expanded capacities in both the project and its participants.

Diversity and *Collaboration*, the two national FSPE initiative criteria, appeared simple and straightforward in the beginning months of the change

effort. Nevertheless, they proved to be formidable descriptors pointing to the isolating conditions of university life where autonomy and competition were the descriptors for success. For instance, the project team's inability to genuinely engage the community college representatives in the change effort was a vivid example of the barriers for diversity and collaboration in post-secondary education systems.

Two additional criteria, *Authenticity* and *Sustainability*, were the products of learning among project team members. The additional criteria described a new level of ownership in the project grounded in capacity-building experiences. *Sustainability* emerged from the desire to create enduring organizational change that would leave a legacy for future generations. The criteria, *authenticity*, emerged from an intense learning experience during the Retreat event and a time of critical reflection immediately following the Retreat. Project team members discovered that change had to be of real value to the individual. They believed that opportunities to expand capacity for change and increase personal value and ownership embodied an authentic process. The draft and final FSPE change design captured the spirit of the criteria and their influence on attempts to position OSU for enduring organizational change (See Appendices I and J, for draft and final change design).

Another indicator of project experience relating to design emerged from four marketing documents described as the one-pagers (See Appendices F, G, H, J for one-pager marketing tools). Key points representative of each marketing document (Figure 8) depict a particular phase in FSPE design development.

Figure 8. Evolution of a Change Design

One-pager	FSPE at OSU	An Uncommon Opportunity	The Oregon Project	InterACTION!
Date issued	Summer, 1994	Fall, 1994	Winter, 1994	Fall, 1995
Participants and Partners	• Land Grant Universities & Ag. Colleges • other Kellogg FSPE projects listed	• diverse group of Oregonians with and without OSU connections • community college partners • other Kellogg FSPE projects listed	• OSU and the 16 Oregon community colleges • steering committee membership listed	• diverse Oregonians, led by OSU and community college partners • 10 to 20 groups of 7 to 9 members led by a facilitator
Goals and Scope	• vision of food systems in 2020 • recommendations for OSU's roles in food systems education	• vision of safe, sustainable food and fiber systems • ideas for how OSU needs to change to be effective in 21st century • model of visioning process	• develop a vision for higher ed. and first steps • build institutional capacity for assessing and responding to stakeholder needs	• shared vision of a preferred future for food systems and education • stay strategic
Design	• OSU: 18 to 24-month futuring process, plus final conference: *The Assembly* • Kellogg: six national symposia	• 18 to 24-month futuring process to create vision	• scenario planning as a method to prepare for visioning event and first steps	• 2-day whole-group commissioning conference • 6-10 facilitated small group meetings • *Common Ground* conference • second phase activities

The evolution of project scope, design, and participation are examples of the dynamic process of change and how lessons learned in the project were reflected in the marketing one-pagers.

By the end of the year, the FSPE change design incorporated an individual approach to change, reflecting the value of capacity-building as a way to create change that was enduring. The final design focused on small groups of participants, working together to expand their capacity for change and to create a shared vision and first steps toward the vision. A design anchored in participant-centered learning through shared experience could enrich the individual, the project, and the institution. These marketing documents not only expressed the spirit of project criteria and issues of scope a different times in the 12-month study, but they embodied the three research themes through the evolution of the change design.

Consider the theme, *Learning How to Change*, and how it impacted the evolution of design. The FSPE project was an experiment in learning how to involve diverse groups and individuals in a change effort, how to find personal meaning in a vision for food systems and post-secondary education, and how to design a process that led to institutional responsiveness. Note that capacity-building for institutional responsiveness is mentioned in the third one-pager column.

A second theme, *Collaboration and the Paradox of Partnership*, reflected the absence of partnership with the community colleges in the first one-pager, then the presence and prominence of the partnership in one-pagers two and three, and finally the continued presence of partnership in the final marketing document. The final document addressed partnership, but by the fall of 1995 partnership was a hollow term with little interaction between the FSPE project

and community college representatives. The official partnership was still intact and recognized but active attempts to collaborate had faded. No one knew how to move forward with collaboration, so it became a non-issue with the hope of future collaborative efforts.

The third theme, *Developing a Change Design*, was the essence of design evolution in the marketing documents. The first one-pager described an ambiguous futuring process and culminating Assembly. The second one-pager was equally ambiguous which to some extent reflected the confusion of learning how to go about the change effort. The third one-pager narrowed the process to scenario-building as a strategy for creating a vision leading to systemic change. The fourth one-pager blossomed into a concrete design that incorporated the spirit of individual participation and offered opportunities for expanding capacity for change through a collective effort.
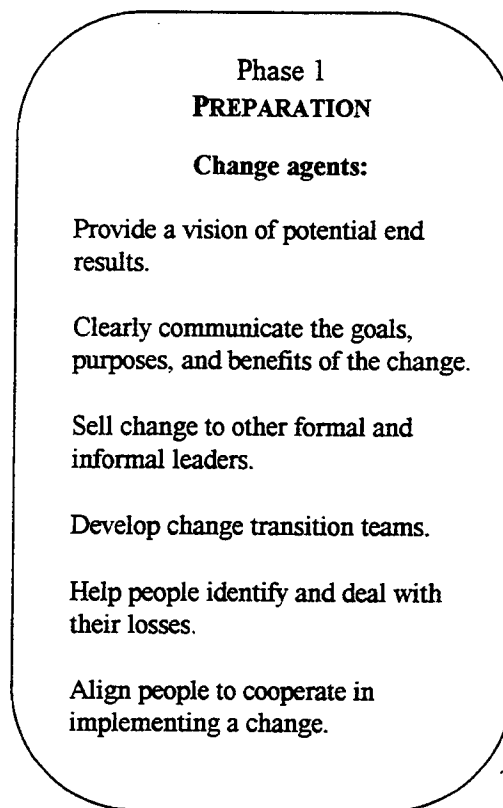
There was no way to be sure the FSPE project design would be enduring. The FSPE experience and current theory suggested deep engagement in the process encouraged ownership in the change effort and strengthened possibilities for enduring institutional change. This assertion was important because current literature also suggested that planned change in higher education organizations was seldom enduring (Curry, 1992).

The systemic nature of the FSPE initiative led me to investigate other processes for change as an avenue for understanding why systemic change was fragile and what constituted a sustainable design. A model that demonstrated

change from the holistic view was preferable because the FSPE change process was intended to be systemic.

I compared the preparation stage of Antonioni's (1994) innovative model for change (Figure 9) with the first year of the FSPE project (See Figure 1, p. 35 for Antonioni's full model display).

Figure 9. Preparation Phase, Antonioni Model

Phase 1
PREPARATION

Change agents:

Provide a vision of potential end results.

Clearly communicate the goals, purposes, and benefits of the change.

Sell change to other formal and informal leaders.

Develop change transition teams.

Help people identify and deal with their losses.

Align people to cooperate in implementing a change.

Antonioni had integrated traditional and innovative theory into a change process, specifically considering generative learning as a recursive function of design. His business model incorporated the concepts of the learning organization, patterns that were similar to shared experience and learning in the FSPE project.

In my search to understand the beginnings of long-term systemic change, I discovered several assumptions about process as it was reflected in the Antonioni model. These assumptions prevailed in popular literature on leadership and organizational change, for example, Kouzes and Posner (1987). The first assumption in Antonioni's model placed change agents as experts in the language and processes of change from the very beginning of the preparation process.

Findings from my study (See p. 137-143 for Thematic Findings) asserted that change agents, the project team in this case, needed time to learn how to change before sharing the message with others. Through the act of sharing the message of an innovative, participant-centered approach to change, they generated new learning about change. Active learning of this nature created opportunities for individual transformation and deeper commitment to the change process. This more closely represented the qualities of generative learning in a learning organization (See p. 38 for Attributes of a Learning Organization).

The second assumption discovered in the preparation stage of the Antonioni model suggested shared vision was a gift provided to participants by change agents or leaders. Consequently, it was the responsibility of change agents to create participant ownership for the vision—a heavy burden indeed and most likely unattainable.

The design for creating a shared vision leading to systemic change in the FSPE project evolved from active participation and the experience of building

capacity for change as represented in the conceptual display in Figure 10.

Conceptually, the curved lines depict change agents and participants coming

together in shared experiences to build capacity for change in which ownership

and meaning are outcomes.

Figure 10. Capacity-building in the Change Process
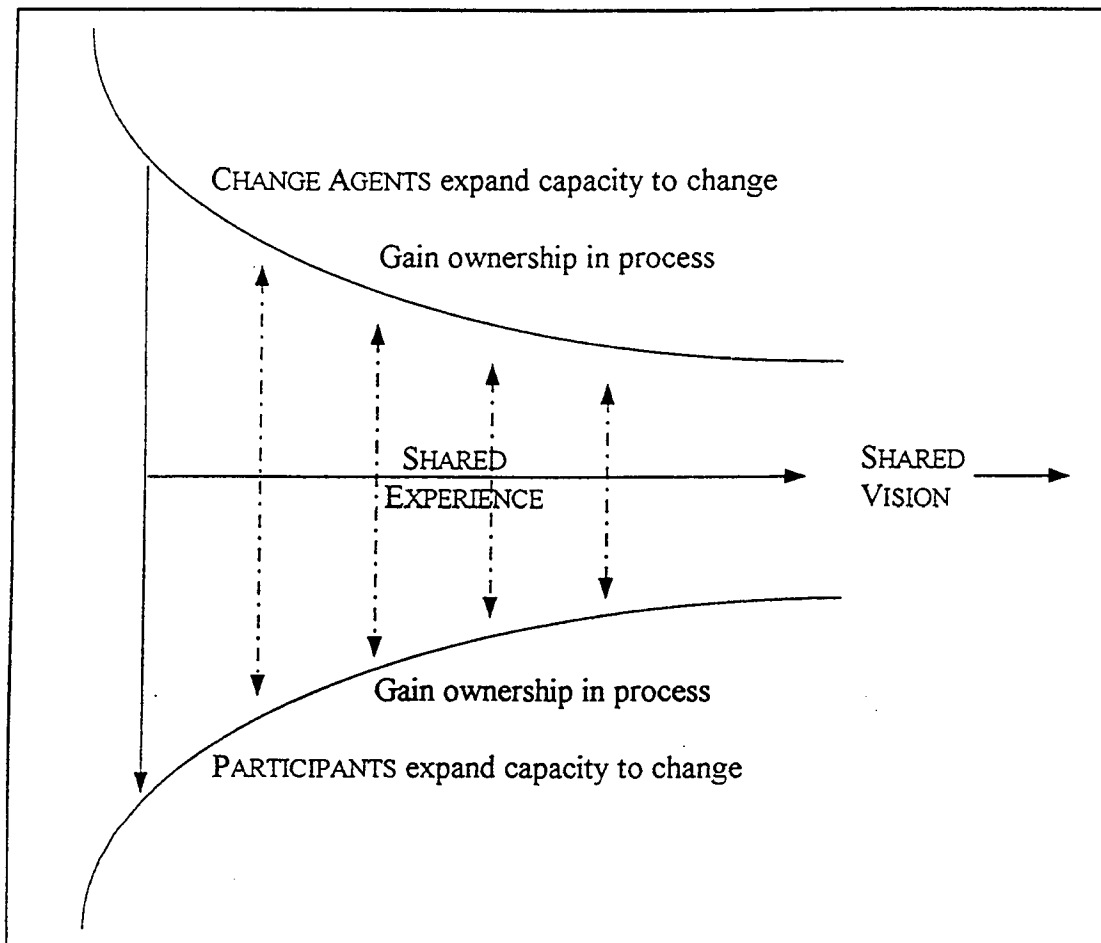
In the final design, shared vision implied a deep ownership by

participants who would create the vision and move forward with the change

effort. This approach to creating a vision incorporated the concept of learning,

where individual values and assumptions were challenged and new perspectives

gained. Building capacity for change in the FSPE project was inextricably linked to the development of a vision design which encouraged ownership and generated meaning through shared experience.

Although Antonioni's model deftly demonstrated shared experience and the necessity of a shared vision through generative learning, the FSPE project's design included one potential key to enduring change--a participant-centered process embracing capacity-building for change through shared experiences. The initiation of a participant-centered process substantially influenced the preparation phase of change in the FSPE project possibly because the project team considered themselves participants.

Learning how to create a design that would have value through shared experience seemed to produce an authentic process for participants that encouraged ownership in the effort. Commitment to the process strengthened enduring organizational change (Curry, 1992). When learning, interaction, and ownership were considered as elements in the preparation phase for change, it opened possibilities for communication in the system and heightened chances for successful institutional innovation.

Why is it significant that these messages about the change process be communicated? Systems nested within systems influence each other, and the FSPE project in the College of Agricultural Sciences quietly influenced the institution with its participant-centered approach to change. In addition to implications for the local project and the College of Agricultural Sciences, there are challenges and implications for the university. If change agents and

participants in the local FSPE project are to be successful in their commitment to institutional change, then the University must respond with more than advocacy for systemic change. Establishing a learning-centered, participant-owned change process requires a system willing to transform.

One path to transformation for the University is to embrace a new concept of learning, not just in the classroom, but in the workplace. This learning concept would support responsiveness in the system. As reported by Rolls:

> Change is the constant. The only way to survive is as a learning organization—to continually adapt, learn, be change-responsive, to reinvent the reality and the future, to transform. Organizations that excel in the future will be those that understand how to gain the commitment of people at all levels and continually expand their capacity to learn (Chawla & Renesch, 1995, p. 102).

This concept of learning moves far beyond the image of life-long learning in higher education organizations, which at its current stage in our educational maturity is more about access to learning than changed perceptions and values. By integrating learning into our thinking of organizations and systems as a natural process of change, the dichotomies of right and wrong, insider and outsider, and success and failure may dissolve value judgments into little more than descriptions. In this light, the FSPE project criteria are not so daunting. Collaboration and diversity may be natural outcomes when learning is embraced as an authentic and sustainable change process.

Land grant institutions are attempting to revitalize their connections with society (Campbell, 1995), and to reflect on their mission in 21st century post-secondary education. OSU is challenged, through the FSPE project to re-direct institutional purpose, strengthen existing University relationships and create

new ones. In an age where information and knowledge open opportunities for connection, how natural that OSU may rediscover its niche in *learning*.

University responsiveness is possible in a changing world when assumptions and images of the system support the attributes of learning in the organization. A learning organization describes an environment where members grow and enhance their capacities to create, where mutual respect and trust is collegial and not positional, where members can experiment and discover without recrimination, where learning is invited at every level, and where members feel they are making a difference (Senge, et al. 1994). When the system *makes a difference* for individuals through its responsiveness, individuals have the opportunity to *make a difference* in society. Using this approach to institutional change may create outcomes connected to the original land grant mission, a people-serving, learning-centered enterprise. The power of the university's purpose may then translate into meaningful action.

Collaboration and Partnership

The final question guiding my research considered the influence of collaboration in the development of a change process. In the beginning of the FSPE project, the concept of collaboration related to shared experiences of project participants and to the development of a vision design based on collaboration. Collaboration also related to a potential relationship with Oregon's community

colleges, because the original FSPE initiative criteria mandated a collaborative process that strengthened ties with the State's community colleges.

The findings of this study provided rich proof that formal partnership was just the tip of the iceberg in the development of a collaborative relationship. Formal partnership between the FSPE project and Oregon's community colleges held no guarantees for successful collaboration. The official partnership evolved during the 12-month case study from a guarded but hopeful stance, to shared participation with little commitment, to minimal involvement and a inactive partnering contract. Although hope of immediate collaboration faded during the year, it was extraordinary that community college and university leaders convened to discuss a shared future and to identify areas of mutual interest and concern.

The seeds of active collaboration were planted between Oregon's community colleges and the FSPE project during the project's first year. Its future growth, however, depends on a committed and collective approach to partnership. The first effort to find common ground was full of both fear and discomfort as each culture attempted to find meaning in shared FSPE activities. Margaret Wheatley's (1996) thoughts on crossing organizational cultures addressed those concerns. "Often our fear stops us from encouraging. . .openness to new connections. We become afraid that we will lose all capacity if we open our organization to new and different members, or if we reveal anything to those we have labeled as competitors" (p. 102).

Traditionally, the university has been the conveyor of wisdom, but there is a wealth of expertise in the community colleges related to shared vision, the process of change, and learning. Both post-secondary cultures have much to share with each other. The time is ripe to begin focusing on cultural difference and competition, two barriers within the FSPE formal partnership. Johnstone's study (1994) asserted that a successful partnering relationship was based on mutual benefit for both parties. The report described successful partnering between a higher education institution and a private business where teamwork, openness to new ideas, trust, and mutual benefit resulted in deeper collaboration and transformation of both organizations. Successful collaboration, as defined in the Johnstone (1994) study, was not present in the FSPE-community college partnership. The conversation between these two areas of post-secondary education must continue around mutually beneficial possibilities if the intent is to collaborate.

In an interview with the president emeritus of the University, issues of mutual benefit and a collective future between Oregon's community colleges and OSU were addressed. I asked if the State's community colleges and OSU were intrinsically different, and his reply emphasized the benefit in a learning-centered approach to collaboration:

> The community college and university are comparable in many ways. They have much the same mission, access to learning for people. The community college and university need to set aside their own concerns and focus on student needs. Until that happens the College and University won't team for a flexible learning experience. If the focus is on individual need and learning, other things fall aside, and collaboration occurs. (Interview, 1996)

Further evidence of the potential for future collaboration based mutual benefit was evident in the national FSPE Orlando symposium notes on community college-university relationship (See Appendix K, Community College-University Relationship). Areas of mutual interest were defined by OSU leaders and several Oregon community college presidents and included: teaching and learning; community college and land grant commitment to serve the community; extended education; and sharing students. One potential impediment was defined as the challenge for both cultures to identify and act on common interests. The conversation between OSU and Oregon's community colleges might begin with these productive suggestions.

My study richly described attempts to partner between two areas of post-secondary education and offered evidence of potential impediments and areas of mutual interest defined by the parties. This information expands the knowledge base about collaboration within organizational change which may encourage future attempts to actively collaborate. It becomes evident that if we are unable to create collaborative relationships between different areas of the education system because of barriers intended to exclude the other, we are jeopardizing the future of all learners.

Further Considerations for the Project and the University

Other implications for the local FSPE project and OSU emerged from my research, and some were mentioned in the thematic findings portion of the last

chapter (See pp. 137-143 for Thematic Findings). They define areas of challenge more specifically, and provide encouragement for change from a systemic perspective.

In the future, as the project evolves through the implementation of visions for food systems and post-secondary education, it will be important that the essence of the original experience remain intact. Design criteria guided the first months in the local FSPE project. They reflected project values, spirit, and purpose. The vision design emerged through shared participant experience. Bringing the design criteria forward with the project secures its intent and legacy. Diversity, collaboration, sustainability, and authenticity are attributes of a more responsive system. Consciously connecting those criteria to the stories surrounding the project's first months of learning establishes the meaning behind shared visions of a more responsive future.

Out of a primary thematic finding, *Developing a Change Design*, the research revealed that a lack of time and staffing resources limited the forward movement of the project. Implications for the local FSPE project were expressed in the need for resources beyond financial. In this respect, project team members lacked the time to hire new team members and bring them up to speed. As the process of change expands in the local FSPE project to include more participants and new opportunities for building capacity, there will be an increased need for strong project management. The project team must have time to reflect, both broadly and specifically, on change design and the project's impact on

institutional responsiveness. They must have the opportunity to model as well as advocate for the participant-centered approach to change.

The results of this research suggested that attempts to model responsive leadership was time-consuming, not understood, and possibly not valued within the bureaucratic structure. The idea of accessible leadership, however, was desired and encouraged. This conflicting message arose in the traditional system as project members attempted to identify inroads to institutional responsiveness. It appeared, from this case study, that the institutional system in its current form might not be prepared to support responsive leadership, although its importance was recognized.

The exemplary leadership modeled by the project director and the principal investigator during the project's first year provided a glimpse at a desired way to be in the workplace and a source for participants to find meaning in the change effort. This approach to leadership is essential for leading change. It opens the way for dialogue, leads to changed assumptions and values, and encourages a more responsive culture in the academic community.

Greenleaf (1991) referred to responsive leadership as servant leadership. "[Servant] leadership provides the encouragement and the shelter for venturing and risking the unpopular. It gives support for ethical behavior and creative ways for doing things better. The result is team effort and a network of constructive interpersonal relationship that support the total effort" (Greenleaf, 1991, p. 6). Current literature on organizational change suggests that active

commitment is essential by leaders if change is to be institutionally enduring (Kouzes & Posner, 1995).

Networks strengthen the work of change and enhance the expansion of our capacity to learn through dialogue and shared experience. Building connections and building capacity are different views of the same image, just as change and learning are two sides of the same coin. If multiple networks are encouraged through the interaction of project participants in the local project, the rippling effect will extend well beyond the current university system. This research revealed the positive impact of networking opportunities initiated by the W.K. Kellogg Foundation among the 12 national FSPE projects. Activities generated over time by those networks may substantially influence the future of post-secondary education and food systems, and consequently 21st century society.

Suggestions for Future Research

There are numerous possibilities for future research in the area of organizational change in post-secondary education. Stories about the process of change in organizations exist, but little is known about learning how to change in higher education institutions. The following suggestions surfaced from my research and from experiences I found particularly challenging as a project participant during the FSPE change effort.

Current concepts of organizational change are transforming the way we think about work and learning in daily organizational life. Future research on the impact of systems thinking on university communication systems and curriculum innovation would extend the knowledge base on the process of change. It would also connect new concepts with creative action in post-secondary institutions.

Continuing research related to the growth of diverse networks and the impact of partnership in post-secondary education would benefit this project and similar change initiatives working to create more responsive organizations. Stories and theory associated with the experience of collaboration are essential for understanding the rapidly changing environment in post-secondary education. Qualitative research in education is gaining credibility and the tools associated with naturalistic inquiry compliment the exploration of human interaction in educational organizations.

My suggestions for future research specifically related to the on-going change process in the FSPE project provide a knowledge base of learning for continued exploration and discovery. Further research on process, collaboration with the State's community colleges, and participant-centered change would provide generative learning for future experimentation.

Continuing the study of the vision process and the implementation of change in the FSPE would act as a reflective tool, feeding back into project design and experience to further enhance the process. Further research that explores the fragile nature of the change process is needed. Tracking the design criteria as a

reflection of project values would be beneficial, particularly when connected to project experience and the university's internalization of those values.

Another area for consideration within the project relates to leadership in the change process. As higher education institutions embrace new ways to relate to change, such as the concept of a learning organization, knowledge related to the barriers and opportunities of leadership for change will benefit the effort. Research about the implementation of a learning organization would provide documentation on the challenges of successful leadership in a collective enterprise. Education organizations have an opportunity to lead organizational change from the perspective of learning, and research on the subject would assist that process.

These considerations for future research represent a sliver of the knowledge base needed to make sense of change in post-secondary systems. My research was intended to draw out the learning experiences in the FSPE project so that others interested in post-secondary change might gain insight into their own institutional change experience.

Final Reflections

The position of researcher-as-participant carries with it the responsibility of observing the collective experience while finding meaning in the individual experience. Awareness is a tool the researcher can access while engaged in the action and it is central to the naturalistic approach to research.

I recognized that my participation as a project team member in an innovative change process influenced project direction. It transformed my thinking about learning, change, education, world poverty, sustainable food systems, and most importantly, how I could make a difference in the collective future of education systems.

The process of inductive research is one of discovery. The role of participant in the FSPE project was one of discovery. As a researcher and participant, my roles merged in the patterns and experience of learning about change. An interesting aspect of this experience was discovering that the learning process and the research process was one pattern. Through the recursive cycle of action, reflection, learning, and action I engaged the process of grounded theory and pursued the nature of change through learning in the FSPE project. Balancing both roles with awareness was my challenge and reward. Discovery was at the heart of this naturalistic inquiry.

EPILOGUE

Never doubt that a small group of thoughtful, committed
citizens can change the world; indeed, it's the only thing
that ever has. (Margaret Mead, source unknown)

A Project Update: *InterACTION!*

The story of Oregon's FSPE project in its first year was incomplete without

an update of the project's design implementation. An update described events

leading to the completion of the vision process and the current status of the

project as of June 1996. Be reminded, there were no guarantees that the

participant-driven change approach would produce a shared vision from the

small vision groups or create inroads to systemic change at OSU. An update of

the project offers a sense of continuity and meaning in the FSPE change process

beyond the case study. Acknowledging the FSPE project within the continuous

nature of institutional change, not as an isolated incident, positions the case

holistically in the life of the institution.

After much consideration, the project team replaced the generic FSPE

project name with *InterACTION!*, an appropriate description of project intent.

Learning how to change in the *InterACTION!* project continued to be a journey of

discovery as the change design moved to implementation. Learning remained

central to the spirit of the project throughout the vision process of Phase I.

Through the collective effort of *InterACTION!* participants and project team members, the implementation of the change design was realized much as it was dreamed at the end of the first year. The design process continued to be a dynamic tool that guided new learning within the *InterACTION!* project.

The *InterACTION!* vision design was implemented in the first few months of 1996. Project advocates were consulted one last time on the feasibility of the design and a timeline for proposed action. With a great amount of trepidation the project team began planning the next six months in the vision process based on small groups of participants working together to envision a future for 2020.

Just as it was difficult to bring the participants' experiences to the change design, so it was difficult to bring broad design to the specific details of meaningful action. We accomplished the task by engaging a nationally recognized futurist to guide the vision design implementation.

A team of professional facilitators were enlisted and trained in project philosophy and visioning techniques to support and guide each of the small groups. The *InterACTION!* advisory committee provided active support and counsel for group convenors who invited Oregon participants to join the small vision groups. Vision group membership was based on diversity, the desire to actively engage in change, and on the 50-50 rule (engage 50% of the group from within OSU and 50% externally). Eight groups, each with approximately ten members, were selected to participate in the vision process. The vision process was intended to be recursive, with new groups working to create shared futures for post-secondary education and food systems.

Contrary to previous strategic change projects at OSU, the process and outcomes were in the hands of the participants. University and community leaders participated in the events and some were members of the vision groups. The design criteria guided our process with a simple one-page guide of objectives and outcomes, referred to as the *Goldenrod Sheet* (See Appendix L for Goldenrod Sheet). It provided the only means of structure for group action other than project team support.

The Commissioning Conference

The last day of February 1996 marked the first gathering of all participants at a Commissioning Conference in a nearby city. Groups were introduced, and together they learned about visioning, the process of change, and the future of food systems and post-secondary education. These were true capacity-building days for *InterACTION!* project members.

My research findings described a rhythm of learning in which anxiety and confusion led to resolution and more learning, and that phenomenon was present again at the first conference of *InterACTION!* The same familiar patterns mentioned in this research as the *roller coaster ride* appeared in the high energy and expectations, frustration and low energy, and leveled out as people sought meaning and clarity.

<u>Vision Groups</u>

During March and April 1996, each vision group met in their respective communities, learning to create and communicate a shared vision of a desirable future. Based on the goldenrod sheet and the guidance of a group facilitator, each group created a verbal description and visual image of their shared vision for the May 9th Common Ground Conference.

There were several significant vision group outcomes:

- Three facilitators formed a small vision group of high school students, increasing the number of groups to nine.

- Each group increased their membership and all groups endured.

- Each group successfully created a shared vision guided by the goldenrod sheet.

<u>Common Ground Conference</u>

On May 9th, all participants gathered for a three-day conference to share individual group visions, explore commonalties across visions, and begin the process of strategic planning—moving vision to action. Over 100 participants and some of the leadership from OSU, Oregon's community colleges, and several participants from other FSPE projects participated in the shared vision experience. The same creative energy that moved the Dallas symposia team from scenarios to visions ignited the *InterACTION!* groups at the Common Ground

Conference, as visions were presented and images discussed within the larger body of participants.

The project team departed the conference feeling satisfied that it was no longer their project but was owned by the participants. Vision groups were characterized by deep ownership, high energy, creativity, and a sense of group respect and community. The dynamics of diverse membership created challenges for groups, but discomfort was understood to be part of the change process. Some group members created lasting bonds with each other and all groups moved forward with their plans.

Looking Ahead to Organizational Change

The *InterACTION!* project, as of June 1996, experienced a time of transition. Nine groups were working to develop projects that reflected their group's vision. Strategic planning and budget development shaped the process into a more task-oriented phase. The goldenrod sheet continued to guide the *InterACTION!* project, but the composition of the project team and the advisory committee were beginning to change and expand to meet the needs of Phase II implementation. The goals for Phase II emerged from the action of participants in Phase I, and another round of vision work with new groups was anticipated. The process continued to be challenging and messy, and yet deeply satisfying.

Have we successfully catalyzed change that will create a more responsive university by the year 2020? Are we engaged in a process that is sustainable,

authentic, diverse and inclusive, and collaborative? Does the process build

capacity for the individual and the institution? Do the collective efforts and

learning of the *InterACTION!* project hold meaning that translate into cultural

change? These questions remain hidden in the future of the *InterACTION!* project

and with participants who dare to be bold enough to learn how to change.

After the Common Ground Conference, one of the facilitators spoke

authentically of her experience:

> Thank you, for making it possible for me to be part of the change
> initiative. . .and most of all for the youth to have a voice. It feels like
> the most significant thing I've been able to do thus far in my life—
> and while I'm hopeful it is just a beginning, if this is all there is, it
> feels like it has been enough to make a difference. (Personal
> Correspondence, 1996)

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APPENDICES

APPENDIX A INTERVIEW QUESTIONS FOR COMMUNITY COLLEGE PRESIDENTS

Interview with Community College Leaders
Participation in the Food Systems Professions Education Initiative
Oregon State University
Janice McMurray, FSPE project assistant

I appreciate your willingness to share impressions of the symposium and FSPE project. The following question are meant to guide, but not to limit our conversation. Please contact me at _____ if you have questions. I'm looking forward to our interview on Tuesday, February 7, 1995, at 2:00 p.m. in your office.

REFLECTIONS ON THE ORLANDO SYMPOSIUM

- How did the symposium and the CEO meeting in Orlando, Florida benefit you and the Oregon community colleges?

PARTNERSHIPS

- I understand that you participated in Oregon project team meetings during the symposium. Did the team meetings facilitate ideas for collaboration? If so, how?

- In relation to the FSPE project, in what ways do you see Oregon's community colleges and Oregon State University working together?

- Thinking about what you see happening in Oregon, politically, socially, and economically, are there particular trends that you think warrant community college-university commitment to the development of partnerships?

- From your perspective what has been the relationship between Oregon community colleges and the Oregon university system historically?

- In what ways do top leadership in community college and university determine the outcome of potential education partnerships?

- What do you see as criteria for successful partnering between the community college and university?

FUTURES

- How have Oregon's community colleges prepared for the future? What are some of the principal ways that your campus has addressed the challenges of the future?

- What is your vision of the future for Oregon's education system? Do you have suggestions for OSU's vision process that would enhance shard vision and move the change process forward?

APPENDIX B CONSENT FORM

CONSENT FORM

You are invited to participate in a conversational interview focused on change in higher education, and specifically the Food Systems Professions Education Initiative at Oregon State University. The purpose of the interview is to provide insight for doctoral research that examines the development of a collaborative model for visioning the University 25 years from now. The interview will focus on leadership for change and community college-university collaboration. Central to the effort is a need to understand forces of change shaping higher education, so your thoughts in this area will be appreciated.

- The procedure for the interview will follow an informal path, where you and the researcher will be in conversation using an open approach with several questions to guide the discussion. Questions will be a available to you for review before the interview. The interview will be approximately on hour in length, and documented by tape recording or note-taking, based on your preference. Interview transcript access will be limited to the project team to ensure confidentiality and anonymity.

- Participation is voluntary. You may withdraw your consent to interview at any time. You may also choose to delete any questions from the list you feel are inappropriate.

Questions about this research should be directed to Janice McMurray, research investigator, or Charles Carpenter, Professor of Education, Oregon State University.

APPENDIX C DATA SAMPLES: THE COMMUNITY COLLEGE PRESIDENTS'
COUNCIL MEETING

DATA SAMPLES
SUBJECT: COMMUNITY COLLEGE PRESIDENTS' COUNCIL MEETING

Meeting notes, August 22, 1994   *1. learning*
2. sharing message B21.2

Overall the presentation was well received. For this particular group we determined that getting to the "what's in it for you" part first, was essential, and dealing with the details later and allowing questions to flow from the brief overview. Since this is the first group outside of the two inner circles of stakeholders to receive a formal delivery, the message would be better if tailored to meet their interest. The group, through the Chair, did agree to consider the invitation to partner either as individual colleges or in collaboration, and they will respond to the invitation by September 16.

Field Reflections (researcher), August 22, 1994   *1. Collaboration*
B21.3

OC: It may be that the CC group didn't know how to react to an invitation from a four-year institution to join in shaping a plan for the future. Traditionally, four-year institutions just egotistically request participation after telling the community colleges what they want them to do. This is a very different invitation. This invitation has no definite guidelines, in fact, it asks community college leaders to help shape a vision for 2020--to truly be a partner!! Will they risk it?

Official project letter, August 24, 1994   *1. Collaboration*
B22.2

I left the session feeling that many if not all of the presidents were interested in the initiative. At least one said, "We can't afford not to be part of this." Others asked good questions and made their own observations about what the outcomes of a visioning process might be.

Field reflections (researcher), August 15,1994   *1. Collaboration*
2. Connection B4.4

OC: I have been invited to attend the luncheon meeting to discuss potential community college and OSU futures. Increasing excitement as I stand by watching people connect with people for potential partnerships....it is as if a flat rock skipped the water several times sending ripples far out into the lake. The first skip is anticipated, but the force of the movement and shape of the rock carry it unanticipated distances.

APPENDIX D DATA CODING AND INDEXING CHART

Data coding and indexing process

Each piece of data was coded with a colored dot to identify the time period and a colored tab to identify the type or source of the data.

Chronological color coding

August 1994 – November 1994	●	(blue)
November 1994 – February 1995	●	(red)
February 1995 – May 1995	●	(green)
May 1995 – August 1995	○	(yellow)

Data source color coding

interviews	▇	(pink)
reflective fieldnotes	▇	(orange)
e-mail	▇	(red)
documents	▇	(yellow)
meeting notes	▢	(white)

In addition, each data unit was indexed using a letter to identify the time period, followed by a number to identify the document and another number to identify the data unit.

examples

B —	1st time period (8/94 – 11/94)	B56.2
D —	2nd time period (11/94 – 2/95)	D1.1
A —	3rd time period (2/95 – 5/95)	A16.1
P —	4th time period (5/95 – 8/95)	P3.2

APPENDIX E DATA CATEGORIES

DATA ANALYSIS CATEGORIES

CRITERIA

DESIGN

CONNECTION

RESOURCES

COMMITMENT

PROCESS

SCOPE AND SCALE

COMMON LANGUAGE

LEADERSHIP

CREDIBILITY

EVALUATION

KELLOGG LINK

COMMUNICATION

LEARNING

TIME

CLARITY

SHARING IDEAS

SHARING THE MESSAGE

VISION

ENERGY

CHANGE

COLLABORATION

UNIQUENESS

PROJECT TEAM

LAND-GRANT INSTITUTION

APPENDIX F "ONE PAGER" PROJECT DESCRIPTION #1

The Food Systems Professions Education Initiative at Oregon State University

Oregon State University will take part in a major nationwide initiative aimed at helping selected universities and colleges identify—and meet—challenges they will face in the 21st century. The W.K. Kellogg Foundation of Battle Creek, Michigan, has named OSU as part of its "food systems professions education initiative."

The initiative aims at assuring that Land Grant universities and their colleges of agriculture will be ready to address needs associated with food systems 25 years from now. Kellogg is encouraging participants to take a broad view of what universities should be doing to help assure a continuing supply of healthful, safe, and nutritious food.

"Food systems" includes the total environment in which food is produced and consumed, according to the Kellogg Foundation. Beyond agricultural production, processing, and marketing, food systems involve environmental issues, social welfare systems, economics, health and nutrition, and related areas.

Initiative contemplates food systems in the year 2020

OSU will enlist help from people throughout Oregon in identifying likely challenges to food systems in the year 2020 and by asking what those challenges imply for the university.

"Oregon State University intends to be part of sustaining and improving global food systems in the next century," said John V. Byrne, OSU president. "Although the College of Agricultural Sciences is likely to continue at the heart of our food systems education, many OSU colleges and departments will play increasingly important roles. The Kellogg Initiative will help us better define these future roles and how we should prepare for them." Byrne chairs OSU's Kellogg Initiative steering committee.

Initiative will culminate in futuring conference

Under terms of a $132,600 grant, OSU will engage people from on and off campus in addressing questions and issues about food systems and higher education. An 18- to 24-month process will culminate in late 1995 at a "futuring conference," called The Assembly. Participants will recommend key steps to ready OSU for its 21st century food systems education roles. The Kellogg Foundation has indicated its intent to be a long-term partner with OSU in implementing the vision for its future that emerges from this process.

OSU receives one of 12 grants nationally

Oregon State's proposal was one of 12 the Kellogg Foundation selected from 39 applicants.

Other institutions selected are Clemson University; Iowa State University; University of Minnesota; University of Nebraska; Ohio State University; Pennsylvania State University (with more than 20 community colleges and state universities); Rutgers (with Cornell University, Delaware State University, University of Delaware, University of Maryland, and University of Maryland-Eastern Shore); the Texas A&M University system; Tuskegee University (with Southern University, Alcorn University, Fort Valley State College, Alabama A&M, and North Carolina A&T); Washington State University (with University of Idaho); and the University of Wisconsin.

The 12 projects encompass 27 Land Grant universities and partnerships with numerous community colleges and state universities. Some 22 states are represented.

Kellogg sponsors symposia

Representatives from all 12 projects meet regularly at symposia sponsored and supported by the Kellogg Foundation. The symposia provide information to help advance the projects and to help build a network for cooperation and communication among participating institutions.

The Kellogg Symposia schedule follows:

June 6-9, 1994
Memphis, TN

July 11-13
Englewood, CO

September 26-28
Bloomington, MN

October 24-26
St. Louis, MO

January 23-25, 1995
Orlando, FL

February 27-March 1
Dallas-Fort Worth, TX

The W.K. Kellogg Foundation

The W.K. Kellogg Foundation was established in 1930 to "help people to help themselves." As a private grantmaking organization, it provides seed money to organizations and institutions that have identified problems and designed constructive action programs aimed at solutions.

The Kellogg Foundation awards most of its grants in the areas of youth, leadership, philanthropy and volunteerism, community-based health services, higher education, food systems, rural development, groundwater resources in the Great Lakes area, and economic development in Michigan.

Kellogg programming priorities concentrate grants in the United States, Latin America and the Caribbean, and southern Africa.

June 20, 1994
Office of the Dean
College of Agricultural Sciences
Oregon State University

FOR INFORMATION ABOUT THE OSU FOOD SYSTEMS PROFESSIONS EDUCATION INITIATIVE, CALL

APPENDIX G "ONE PAGER" PROJECT DESCRIPTION #2

An uncommon opportunity

to help shape Oregon's Land Grant university for the 21st century

You're invited to join people from throughout Oregon in a process to help shape key programs and services that Oregon State University—and, possibly, other colleges and universities—will provide in the 21st century. OSU is part of a network of universities working with people and groups across the nation to envision post-secondary educational systems to serve them in the year 2020.

The W.K. Kellogg Foundation of Battle Creek, Michigan, is supporting a two-phase effort that begins with an 18- to 24-month long "futuring process" to create visions the universities can begin working toward. In the second phase, universities and their partners will undertake the first steps toward achieving their vision.

Who will be involved?

The project will involve Oregonians who have not traditionally been associated with the Land Grant university as well as others who are students, alumni, faculty, staff, businesses, supporters of research, and cooperating agencies and organizations. Diversity among participants is essential at each step.

OSU is making special effort to welcome as partners the state's community colleges as well as other Oregon State System of Higher Education institutions. Together, participants will help determine:
• how to assure the institution is responsive to those it serves;
• in what ways and how broadly it should deliver its programs;
• how it should change as an organization to enable it to carry out its 21st century mission effectively.

The futuring process is structured around a concern shared among all people—the sustainability and quality of the world's food and fiber system. Participants will explore questions like:

"What should Land Grant universities be like if they are to help assure a continuing supply of safe, nutritious food and adequate supplies of fiber in the 21st century?"

"What kinds of graduates will the world need to address the issues of food and fiber supply, quality, and availability?"

"How can we assure a global perspective in 21st century education?"

"What kinds of partnerships would advance the educational needs of Oregon?"

"What kinds of programs should Land Grant universities be offering, and to whom?"

The project focuses on food systems because food and fiber are universal to human welfare and provide a broad basis in the university—and throughout society—for envisioning a desired future. Food systems include the total environment in which food and fiber are produced and consumed. Beyond production, processing, and marketing, food systems involve education, environmental issues, social welfare systems, economics, health and nutrition, and related areas.

The project also recognizes the fundamental reason Land Grant universities were established: to provide access to education to those for whom it otherwise might not be available. It will ask the question, "If we were creating the Land Grant university today, what would it look like and who would it serve?"

One of the objectives of the project is to learn from the visioning experience so that other schools, colleges, and universities may adopt similar processes to create visions for their own futures.

Other participants nationally...

Clemson University

Iowa State University

University of Minnesota

University of Nebraska

Ohio State University

Pennsylvania State University (with more than 20 community colleges and state universities)

Rutgers (with Cornell University, Delaware State University, University of Delaware, University of Maryland, and University of Maryland-Eastern Shore)

Texas A&M University system

Tuskegee University (with Southern University, Alcorn University, Fort Valley State College, Alabama A&M, and North Carolina A&T)

Washington State University (with University of Idaho) and

University of Wisconsin.

The 12 projects encompass 27 Land Grant universities and partnerships with numerous community colleges and state universities. Some 22 states are represented.

The W. K. Kellogg Foundation

The W. K. Kellogg Foundation was established in 1930 to "help people to help themselves." As a private grant-making organization, it provides seed money to organizations and institutions that have identified problems and designed constructive action programs aimed at solutions.

The Kellogg Foundation awards most of its grants in the areas of youth, leadership, philanthropy and volunteerism, community-based health services, higher education, food systems, rural development, groundwater resources in the Great Lakes area, and economic development in Michigan.

Kellogg programming priorities concentrate grants in the United States, Latin America and the Caribbean, and southern Africa.

Who has a stake in this project?

You do, if...

✔ you produce, process, distribute, sell—or buy—food and fiber, or

✔ you manage natural resources, or

✔ you are interested in the future of the global food and fiber supply, or

✔ you teach students who will influence how food and fiber are produced and distributed in the future, or

✔ you are an alumnus, friend, or critic of higher education, or

✔ you see opportunities for improving education and research programs that relate to food, fiber, natural resources, and the environment.

In short, everyone is a stakeholder!

How you can be a part...

There are many ways you may help. You may help us design the process. You may contribute ideas and expertise. You may take part in the process leading to a vision and an implementation plan. We're still designing the process, but we're eager to hear from you. We'll be happy to keep you informed, to discuss the project with your group or organization, and to notify you of events and activities.

v1.1

APPENDIX H "ONE-PAGER" PROJECT DESCRIPTION #3

THE OREGON PROJECT

An uncommon opportunity to create and sustain change in Oregon's Land Grant university and community colleges

Project description and objectives

Oregon's Land Grant university and the State's community colleges are partners in a change initiative aimed at helping them prepare to meet educational needs of their students and others who will be their stakeholders in the 21st century. Assisted by a grant from the W.K. Kellogg Foundation, Oregon State University and the state's 16 community colleges will engage in activities throughout 1995 to help faculty, staff, students, and numerous stakeholders anticipate alternative futures. The initiative will lead to development of a vision for these major elements of higher education in Oregon for the year 2020, and a plan for taking the first steps toward that vision.

Participants will help determine
• how to assure the institutions are responsive to those they serve;
• how and to whom the institutions should deliver programs; and
• how institutions should change as organizations so they may carry out their missions effectively in the 21st century.

A long-range aim is to build institutional capacity for assessing needs of their stakeholders, and for adapting as those needs change.

The initiative will explore the role of Oregon State and the community colleges in educating the nation's and the world's future food systems professionals, but it is not limited to that area.

Scenario planning is core method

Although the pace of global change is greater than ever, people often do not have training or experience in preparing for the future. The initiative will work with a variety of groups, guiding them through "scenario planning" experiences. Scenario planning is a technique used to create images of plausible alternative futures, then exploring the assumptions underlying those futures and how people and institutions might respond. Scenario planning works because it allows people to discuss different futures without feeling compelled to argue for one over another. It encourages them to discuss key decisions and actions they might take under different conditions, and what the consequences might be.

Once equipped with techniques and vocabularies for discussing the future, faculty, staff, students, and stakeholders will be prepared to sustain their future-oriented activities, even to the extent of making decisions today that will help move their organizations toward "desired futures."

After assisting groups with their own scenario planning, including some focusing on how to educate food systems professionals for the 21st century, the initiative will sponsor a "visioning event." Diverse stakeholders in Oregon's education system will collaborate with faculty, staff, and students to create an image of a future—25 years away—that they are prepared to work toward. They also will identify the first few steps they think are necessary toward achieving that future.

Project steering committee is broadly based

Oregon's 16 community college presidents have expressed support for the initiative. They have designated two presidents (representing Chemeketa Community College, Salem, and Linn-Benton Community College, Albany) as liaison to the project.

The steering committee for Oregon's project involves top-level leadership and is broadly based. OSU President John V. Byrne chairs the committee. In addition to the community college presidents, participants include the University provost and associate provost, deans of liberal arts, agriculture, forestry, and home economics and education. Also participating are representatives of multi-cultural affairs, international education, and the Western Center for Community College Professional Development.

Being part of the solution —not part of the problem!

The project strives to avoid becoming "just one more thing" for already busy people to do. Instead, project strategy recognizes that many individuals and organizations are struggling to understand the changing world around them—and to identify their places in it. Working initially with those who already have decided to think actively about the future, the project offers practical assistance that builds people's confidence and allows them to explore alternatives.

APPENDIX I DRAFT OF "ONE-PAGER" CHANGE DESIGN

FSPE
7/28/95

Design

DRAFT

Assumptions
• Enduring change can comes through the action of people committed to a vision.
• Faculty are key players in institutional change initiatives because faculty are best positioned to effect it. Therefore, faculty must be actively and extensively engaged in a change process.
• An organizational vision has meaning only if individuals can hook their own personal visions into it.

Design criteria
Authenticity
Sustainability
Diversity and inclusivity
Collaboration

Design for the Oregon project
Concept: Acting in parallel, somewhere between 10 and 20 small groups will engage in a visioning process. Ultimately, the groups will collaboratively identify a collective vision for food systems professions education in the year 2020

Our process
...is based on small groups. Each group is small enough (7 plus facilitator) that it can function effectively, members can build relationships with each other, find mutually agreeable meeting times, ...
...provides a facilitator for each group.
...begins with an exploration of alternative personal and organizational futures, helping to give each person conceptual tools

Each group moves through processes that lead to...
• establishment of a personal preferred future;
• exploration of plausible alternative futures (for food systems professions education);
• collaborative development of a preferred future (vision), 25 years away, on which the group agrees;
• identification of the first steps that can be taken toward the preferred future.

Having reached a statement of its own preferred future for food systems professions education, each group...
• has earned a "chit," or entitlement to, a share of the resources available in the implementation phase of the Initiative.

Having experienced success as a collaborative group in itselft, each group is encouraged to collaborate with one or more other groups. Their goal will be to find commonality in their preferred futures and to build a joint preferred future based on that commonality. When they define a mutually agreed on future, they earn additional entitlements to resources for Phase II.

In the course of these activities, the group is...
• gaining collaborative experience,
• learning how to talk about the future,
• learning how to express a vision.

These activities lead up to what we are calling the "Common Ground" conference at which participants practice, on a larger scale, the collaborative visioning they have been engaged in personally, within groups, and across groups. At each step of the process (after the first), participants describe a preferred future into which they can hook an earlier preferred future. This is consistent with the belief that people are prepared to work toward a larger vision only if they see how it advances their own. The Common Ground conference yields a collective preferred future and first steps toward achieving it. It is an umbreela for group and cross-group preferred futures. The vision and first steps emerging from the Common Ground conference form the basis for the Oregon Project's proposal to the W.K. Kellogg Foundation for authorization to proceed with Phase II implementation.

Advantages of this process...
• Builds what we believe could be the core of a learning organization.
• Places definition and articulation of the vision in the hands of the groups, not the project, the administration, or some third party.
• Builds on what is unique about this effort: resources are available that are dedicated to implementation of the vision(s).
• Each group is empowered to establish a vision and provided with resources to work toward achieving it.

Participation: the exchange

What do we have to offer participants (including facilitators):
• An opportunity to be associated with a nationally recognized change initiative in higher education. (With links into professional associations, NASULGC, institutional CEOs, etc.).
• An opportunity to shape one or more dimensions of food systems professions education for the next century, at anywhere from the local level to internationally. Resources provided to help take the first steps toward your vision.
• An opportunity to engage in collaborative visioning process with a small group of people of diverse backgrounds and interests.

• An opportunity to learn more about techniques for visioning, for creating "learning organizations," and for institutional change.

APPENDIX J "ONE-PAGER" FINAL CHANGE DESIGN

interACTION!

THE OREGON INITIATIVE FOR 21ST CENTURY FOOD SYSTEMS EDUCATION

Food. Safe, nutritious, readily available food. People everywhere share this basic human need, but what assurance have we that food needed in the 21st century will be available for us and successive generations? One key to enduring food availability is **educated people.** People who understand the natural and human systems that affect food. Educated people who are equipped to anticipate and meet the challenges to food security that surely lie ahead.

In the first half of 1996, a number of Oregonians will explore what Oregon might begin doing now at the college and university level to help assure continuing availability of safe, nutritious food well into the next century. These Oregonians will be the first participants in *InterACTION! The Oregon Initiative for 21st Century Food Systems Education,* led by Oregon State University with partners among Oregon's community colleges.

InterACTION! is unlike any academic planning exercise you've ever known because it's **not** about planning. It's a bold leap into the year 2020. *InterACTION!* means learning and collaborating with others to create a shared vision. *InterACTION!* is about imagining the food needs of the 21st century, envisioning how education can help address them, and acting now to shape a preferred future.

Acting now will require a clearly stated vision that people are willing to work toward, help from many people beyond those who are initially part of *InterACTION!,* and resources. A carefully designed, but fast-paced process will help participants describe their preferred future. The process will provide a framework for involving others who share concerns for the future of food systems and education. Resources, specifically to help groups take first steps to their preferred future, have been set aside. These funds will be allocated in increments, as groups articulate their vision and achieve broader involvement of others, putting into place relationships that will help propel the vision to reality.

interACTION!

THE OREGON INITIATIVE FOR 21ST CENTURY FOOD SYSTEMS EDUCATION

The process: a role for you

Thinking globally, acting locally: small groups are the heart of InterACTION!

As a participant in *InterACTION!*, you will take part in one of 10 to 20 small, yet diverse groups. A group will consist of 7 to 9 members, guided by a trained facilitator. About half the members of each small group will be "customers" of a university or college: students, agricultural producers, processors, marketers, businesses, rural and urban consumers, hunger relief and health workers, and others with a stake in food systems. The rest of the members will be faculty or staff closely allied with a university or college.

What the small groups will be like

Anyone may propose a group to the *InterACTION!* Project Team. There are no formulas specifying who the members may be, but proposed groups will have a better chance of being selected if...

• Members are drawn about equally from outside universities and colleges and from within. This mix will help open a dialog about customer-responsive education.

• Members reflect different backgrounds and interests. We seek cultural and ethnic diversity, age and demographic variety. *Diversity is creativity waiting to happen,* and creativity is what's needed to address a future 25 years away!

• Members include individuals from communities or interest groups not traditionally involved in planning or shaping policy for food systems.

We're especially seeking teams that include members from Eastern Oregon State College, where OSU already is engaged in an academic partnership; community colleges, especially Chemeketa, Clatsop, and Linn-Benton; Portland State University; and K-12 schools.

Getting started on the process: Commissioning Conference

Individual groups may choose to meet informally beforehand, but *InterACTION!* begins officially early in 1996 with a two-day Commissioning Conference. It will bring together all of the small groups, their facilitators, the *InterACTION!* Project Team and others. Nationally recognized futurist Peter Bishop will lead skill-building sessions to equip groups with proven visioning techniques they will employ when they begin working independently. Best-selling author and national leader in organizational change Rich Moran will help groups understand how to find "levers of change" and other tools to effect the first steps toward their vision.

The Commissioning Conference will help you understand the aims of the Initiative, provide a chance to get acquainted with members of other groups and create opportunities for continuing interactions with them.

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InterACTION! continues: groups at work

After the Commissioning Conference, your group will work on its own schedule and with its own trained facilitator, meeting 6 to 10 times, perhaps once a week. In your group, you'll engage in a process that will...

• establish personal preferred futures;

• explore plausible alternative futures for food systems professions education (scenario planning);

• collaboratively describe a vision (preferred future) of customer-responsive education that supports food security in a world 25 years from now;

• broaden the base of participation in the Initiative by involving others;

• identify the first steps relating to post-secondary education that your group can take to help achieve its preferred future.

In the course of these activities, you'll gain collaborative experience, learn new ways to talk about the future, learn the power of scenario planning, and learn how to express a vision.

Common Ground: It all comes together!

The Common Ground Conference, conducted about 8 to 10 weeks after the Commissioning Conference, will involve your group and others like it from throughout the state. With them, you'll have a chance to share your group's vision and learn about theirs. In fact, Common Ground will open with a 'vision-exchange' in which participants will be looking for commonalities among the visions. On these commonalities, the Conference attendees will build an over-arching vision: the key to unlocking the second phase of InterACTION! and the resources that go with it.

The second phase: unlocking the future

A variety of activities will unfold when InterACTION! enters its second phase. That's a move from visioning and networking to implementation that builds on what will have happened in the first phase. Groups will work individually or with other groups on steps to advance their vision. Groups earn up to $15,000 to use in the second phase by bringing in others who can help achieve the vision, attracting outside resources to help with implementation, collaborating with other groups, and gaining diverse participation.

Some first phase participants will be invited to join a national initiative aimed at preparing leaders for working in an environment where change is the norm. Additional participants, brought to the initiative by groups in the first phase, will be invited to embark on their own visioning experience, incorporating what has been learned in the initial phase.

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Staying strategic

InterACTION! is about food systems in the 21st century and what we can begin doing now to help assure food security through education. Although groups will have great flexibility in how they approach the charge, the *InterACTION!* Project Team expects the small groups to frame their visions and first steps in relation to this strategic purpose. Food systems education can serve as a vehicle for forging partnerships, stimulating greater responsiveness to education's customers, developing leadership, and engaging broader participation in addressing the fundamental need for food.

Facilitators

InterACTION! plans to invite only experienced facilitators to work with the Initiative. Training by futurist Peter Bishop and others will equip them with additional skills to guide individuals and groups in visioning. The same facilitator will stay with a group from the outset through the Common Ground Conference.

Sponsorship and networking nationally

InterACTION! The Oregon Initiative for 21st Century Food Systems Education is part of a national effort sponsored by the W.K. Kellogg Foundation in association with 11 other grantee institutions. The 12 projects encompass 27 Land Grant universities and partnerships with numerous community colleges and state universities. Some 22 states are represented.

The W.K. Kellogg Foundation is one of the nation's largest philanthropic foundations. It has a long history of involvement with Land Grant universities like Oregon State, encouraging innovative work to benefit children, families, students, and communities. The Foundation provides resources to catalyze institutional change rather than for long-term program purposes. The national leadership initiative mentioned previously also is sponsored by the Foundation.

Forming a group

If you are thinking about forming a group, we will be pleased to provide detailed information. Just ask the project director for assistance.

Financial assistance for participants

To help encourage participation, *InterACTION!* will assist with expenses including travel, overnight accommodations for the two conferences, meals, mileage, and certain incidental expenses.

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APPENDIX K COMMUNITY COLLEGE-UNIVERSITY RELATIONSHIP

RELATIONSHIPS: COMMUNITY COLLEGES AND THE OREGON FOOD SYSTEMS PROFESSIONS EDUCATION INITIATIVE

Drawn from sessions at the W.K. Kellogg Foundation's Orlando Symposium
January 1995, Observations

- [Two] community colleges have considerable experience with visioning. Visioning cam be mandated for departments, provided there is latitude in how the departments carry it out and sustain their commitment to it. Recognize that middle managers, especially, must learn to "let loose" when faculty and stakeholders are empowered to create and move toward their vision.

- Although there are likely many areas of common interest between community colleges and four-year institutions, four recurred in our discussions at Orlando that may suggest opportunities for collaboration. First, teaching and learning. The community colleges have demonstrated a strong commitment to assuring that their students learn. The colleges have experience with reward systems oriented to teaching and learning. [Community colleges and the University] all have groups of faculty working collaboratively to advance teaching and learning. These groups may be potential cooperators in the Initiative. Second, with the community colleges, the Land Grant university has a distinct commitment and obligation to serve the community. Third, extended education is a fundamental role of the community colleges and one that Oregon State is increasingly emphasizing. Fourth, we share students. This goes beyond what might be immediately obvious. Although the four-year institutions may be destinations for students who begin their studies at community colleges, we also recognized that these same students may subsequently turn again to the community colleges for continuing education. Are there not unexploited opportunities to recognize this dynamic and to collaborate toward integrative teaching and more effective learning?

- There may be impediments to university-community college collaboration on the Food Systems Professions Education Initiative. One could be heavy workload, a reality shared by all faculty. Another could be distance from one institution to another. Still a third could be the challenge of identifying and acting on common interests. A fourth impediment may be the name of the Initiative (food systems) which can be perceived as too narrow.

- On balance, it still appears the initial relatively informal collaboration on the project should be sustained. Both [community college representatives] have indicated a willingness to review and critique the next draft of a project plan. Both have expressed willingness to stay involved and to help identify opportunities for potential collaboration with Oregon's community colleges that is consistent with the theme and purpose of the Initiative.

February 2, 1995

APPENDIX L THE GOLDENROD SHEET

InterACTION!
The Oregon Initiative for 21st Century Food Systems Education

Goals for visioning groups

To create a vision for the year 2020 ...

...that will lead to systemic change in food systems, post-secondary education in Oregon, or both.

...that is collaborative—the product of creative contributions of all members of your group.

...that can be embraced by diverse groups.

...that members of your group are willing to work toward.

Objectives

To have engaged in a regular exchange between the group and an "international correspondent."

To present your group's vision to the Common Ground Conference, May 9-11, in Portland.

To bring to the Common Ground Conference up to three new partners that your group has enlisted, or written commitments from two or more individuals, groups, or organizations who are willing to work toward achieving your group's vision.

About presenting your vision...

Plan to present your group's vision in two different ways at the Common Ground Conference.

• So everyone attending may be acquainted with *each* of the visions, your group may use up to 15 minutes for its oral presentation to the full Conference.

• So that everyone may have a chance to visit informally with members of your group, plan on a poster-session presentation in whatever manner you believe most effectively portrays your group's vision.