FORMATIVE RESEARCH ON A DESIGN THEORY TO

FACILITATE SYSTEMIC CHANGE IN PUBLIC SCHOOL DISTRICTS

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This dissertation is dedicated to my mother, Geralde Jabouin Joseph who inspired me to pursue my dream of helping to ensure that all children received high quality educational opportunities.

I wish to also dedicate this work to the other members of my family who played an instrumental role in shaping my beliefs, character, and integrity: Marcelle Rabel, Marie Fanie Rabel, Harry Rabel, Reynold Rabel, and Patrick Desmangles

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Abstract

Roberto Joseph

<u>Formative Research on a Design Theory To</u>

<u>Facilitate Systemic Change in Public School Districts</u>

This study utilized a qualitative research methodology known as formative research (Reigeluth & Frick, 1999) in order to improve upon the process guidelines that are described in the Guidance System for Transforming Education (GSTE). The GSTE is a design theory for facilitating systemic change in public school districts that was developed by prominent educational researchers in the fields of Instructional Technology and Educational Leadership (Jenlink et al., 1996). The GSTE has never been field-tested in the context for which it was designed, a school district. This study took place in the context of a small (student population 5,447), partly urban and partly rural school district in Indiana. The researcher, also serving as facilitator, investigated the early stages of the systemic change process as outlined in the GSTE. Specifically, the research focused on field-testing and improving the following three Events: <u>Event 5</u>: forming a Core Team of school leaders (Superintendent, PTA/O President, Principal, Board Member, and Teachers' Association President), <u>Event 6</u>: developing this Core Team of leaders in a two-day retreat, and <u>Event 7</u>: building the Core Team's knowledge base in systems thinking and systems design.

It was found that Event 5 could have been improved if a member of the support staff had been invited to serve on the team. Also, the need to acquire student input, without requiring that they serve on the Core Team, emerged as

an important finding in this Event. Event 6 could have been improved if the Event

had included a sample retreat agenda. The researcher could not formatively

evaluate the original Event 7 since it was redesigned so significantly in this case.

Instead, a process was developed by the facilitators and the Core Team that

included a series of readings, group dialogues, and collective reflections, which

helped the Core Team to begin to develop a learning community.

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CHAPTER 1: INTRODUCTION

Background

Change is not a fully predictable process. The answer is found not by seeking ready-made guidelines, but by struggling to understand and modify events and processes that are intrinsically complicated, difficult to pin down, and ever changing. (Fullan & Stiegelbauer, 1991, p. 107)

History teaches us that we have been reactionary to urgent calls for the improvement of our nation's public schools. We have answered these calls in a piecemeal approach, by patching up the parts of the school system that need improvement most. In the past century, our nation's educational system has adapted to meet the needs of its evolving local communities and global society. However, currently our public educational system is failing to meet the needs of an information age society (Banathy, 1991; Jenlink, 1995; Reigeluth & Garfinkle, 1994). America's public educational system is in need of a systemic (fundamental) change (Banathy, 1991, 1992; Reigeluth & Garfinkle, 1994). In this chapter I offer a brief overview of urgent calls for educational improvement, waves of societal change, systemic vs. piecemeal change, and product vs. process orientation. This study focuses on testing, understanding and improving events of a systemic change process in the context of a school district.

Urgent Calls for Improvement

In 1957, when the Russians launched the first satellite in history, *Sputnik*, Americans became concerned with its national security, and with losing its place as a global economic and military leader (Dickson, 2001). This feeling of being technologically outraced by Russia caused Americans to work on making our educational system more effective. The Sputnik era created many innovative educational improvement programs. According to Fullan and Stiegelbauer (1991), these educational innovations later came to be criticized by many in the educational research community, because no thought was given to their purpose or implementation.

In 1983, another urgent call for the improvement of our nation's schools came in the form of a government report—"A Nation at Risk" (United States. National Commission on Excellence in Education, 1983). The report was released by the National Commission on Excellence in Education, and it rang an alarm that Americans had not heard since the Sputnik era. The message was clear, and the bottom line was that our educational system was not keeping pace with other nations, and that comprehensive changes in our educational system were needed.

Since the Sputnik era and the release of "A Nation at Risk" (1983), educators and policymakers have learned a lot about educational change. Educational stakeholders have seen a bombardment of school reform efforts and change models across the nation promising to improve the American public school system. Concurrently, well-intended educational researchers have

devoted their lives and careers to finding the one solution that could transform America's failing public school system. Unfortunately, the urgent call for educational improvement, and the change efforts and models that have emerged from these calls have yet to make a significant impact on transforming the American public school system (Banathy, 1991; Cuban, 1988).

Waves of Educational Change

In addition to identifying the key moments in history that have created a sense of urgency for change in our educational system (i.e., Sputnik & A Nation at Risk), it is also helpful to highlight historically how society has changed, and whether our educational system has kept pace with the needs of a changing society (Reigeluth, 1994). Our society has experienced waves of change that have affected all aspects of the way we live (Toffler, 1980). Each wave created the need to drastically change the way we have thought about schools. The *first wave*—the agrarian age—of change focused on creating and improving the one-room schoolhouse system of education.

The *second wave*—the industrial age—of school change focused on restructuring the one-room schoolhouse or transforming it into the existing educational system. This was a very different way of thinking about schools, and the industrial revolution was a driving force behind this wave of change. For the first time educators were thinking of new ways of structuring all aspects of the educational system in order to meet the needs of an industrial society.

The *third wave*—information age—of change requires that educators think outside the boundaries of the current educational system (Banathy, 1991). Some researchers consider the school choice movement (i.e. vouchers and charter schools) as examples of the third wave of change (Darling-Hammond, 1997). However these alternative forms of schooling seem to be at best, improvements to the existing educational system. Banathy (1991) asserts that "whatever terms are used, 'improve,' 'reform,' 'renew,' 'restructure,' the host of recommendations and projects focus on MAKING ADJUSTMENTS IN THE EXISTING SYSTEM, rather than thinking about a new one" (p. 8).

Currently, there is a growing body of research that focuses on guiding educational stakeholders in creating a totally new educational system (see Banathy, 1991; Duffy, Rogerson, & Blick, 2000; Jenlink, Reigeluth, Carr, & Nelson, 1998; Reigeluth & Garfinkle, 1994). This research is based on the assumption that our educational system has not kept pace with the changing needs of our information-age society, and that educators and policymakers need to focus on making systemic changes, as opposed to piecemeal changes in our educational system.

Many researchers argue that our schools reached a high point in terms of effectiveness sometime between 1950 and 1960 (Branson, 1987), and that currently schools are failing to meet the needs of an information-age society (Reigeluth & Garfinkle, 1994). On the contrary, other researchers have argued that, based on the historical analysis of standardized test scores and drop-out rates, schools have continued to improve, and the educational system is not as

bad as the media, educators, and politicians have portrayed it (Berliner & Biddle, 1995; Bracey, 1994). However, test scores and drop-out rates cannot give us a complete picture of the status of our educational system. A fundamental point in the systemic change literature is that even with improvement in some areas, our schools have not kept pace with the changing needs of our society (i.e., working in teams, shared decision making, knowledge management, and focus on process).

Systemic Change vs. Piecemeal Change

To gain an understanding of systemic change, it is helpful to distinguish between systemic and piecemeal change. Some researchers refer to piecemeal change as *first-order* changes and systemic change as *second-order* changes (Cuban, 1998). Banathy (1991) characterizes the difference in the following passages:

> SYSTEMIC CHANGE is based on a systems view of an organization, and it is guided by the principle that any change in a part of the system affects the whole system, and any change in the whole affects all of its parts. Second, the system is more than the sum of its parts, more by the interaction among the parts and the emergent effects produced by the interaction. Third, change occurs by purposeful design. Fourth, a systemic change—even the smallest one—is contemplated in view of the relationship between the system and its environment.

PIECEMEAL CHANGE allows tinkering with or changing parts in an effort

to improve the system. Change is not "mapped" into the whole system.

Changing parts happens without consideration of its effect on the

relationships that operate among parts and between the system and its

environment. On account of this "non-systemic" nature of piecemeal

change, change is usually short-lived because it was not accomplished

with the involvement of the other parts and lacks their cooperation. (p.

149)

Advocates of systemic change view school restructuring as a form of

piecemeal change. Most school change is inherently not systemic because it

focuses on the school or a part of the school as the unit of change. In order for

systemic change to be successful, it requires substantial changes in all aspects

of the educational system (i.e., government policy, board of education, district,

schools, classroom practices, curriculum, assessment, etc). Fullan and

Stiegelbauer (1991) stated that "the challenge of the 1990's will be to deal with

more second-order changes that affect the culture and structure of schools,

restructuring roles and reorganizing responsibilities, including those of students"

(p. 29).

Product vs. Process Orientation

It should be noted from the onset that this study is not about the diffusion

of an innovation (product) throughout an educational system (Rogers, 1995). The

diffusion research does not tell us much about the process of engaging in a change effort where the end-product is the creation of an innovation—the newly invented educational system. The diffusion research begins with the end-product—the innovation—and focuses on the adoption of that innovation.

Systemic change in education (which is the primary focus of this study), emphasizes a process orientation (i.e., how to redesign an entire school system) as opposed to a product orientation (result of change). Argyris (1954) defines process as "… any course or sequence of behavior accomplishing a purpose" (p. 9). Hammer and Champy (2001) define "process as a collection of activities that takes one or more kinds of input and creates an output that is of value to the customer" (p. 38). French (1973) defines process as "a flow of interrelated events moving toward some goal, purpose, or end" (p.426). In this study, the *process* of change is defined as the events and activities that are designed by the stakeholders of the school community that initiate and sustain a systemic change in the educational system and its community environment. The major *product* of a change process is the new educational system, which in turn has its products, such as achievement (often measured by standardized test scores), attendance, teacher satisfaction, parent involvement, etc. (C. M. Reigeluth, personal communication, September 16, 2002). Much of the school change literature has focused on the product indicators of school improvement (i.e., test scores, parent involvement, etc.) when evaluating the effectiveness of a particular school change model (Comer, Haynes, Joyner, & Ben-Avie, 1996; Cuban, 1984).

School change models can also be viewed as products that are sold to schools. Educational practitioners are under great pressures to improve the educational achievement of their students. These practitioners are already overwhelmed and over burdened by the current conditions of education, and therefore do not have the time to develop strategies (process) to change the current condition of their schools, let alone to create their own models of schooling. So they purchase or acquire a change model (product) that they feel might be a good fit with their needs and conditions. Educational practitioners do not have much flexibility in deciding on the key elements of the model. These elements are inherent in the pre-packaged model that the school acquires.

Additionally, school change models that are product oriented focus on what the new educational system should look like. For example the principles below that are outlined in the Coalition of Essential Schools (CES) describe what schools should look like, yet they offer no process guidance to help educators implement each of the principles.

The CES Principles are (Sizer, 2000):

1. The focus should be on students learning to use their minds well

2. A school's goals should be simple—less is more

3. A school's goals should apply to all students

4. Maximize personalized learning

5. Student as worker, teacher as coach

6. Document with authentic assessment

7. Value expectations, trust and decency, include parental involvement

8. Principal and teachers as generalists first, specialists second

9. Administrative planning with lower student to teacher ratios

10. Honor diversity (online)

There are many additional examples found in the literature of change models that describe what schools should look like. In 1992 when President Bush Sr. called for "break the mold schools" the **New American Schools Development Corporation** (NAS) responded by funding educational researchers who where developing change models (Stringfield, Ross, & Smith, 1996). To date the NAS models have not created a fundamental change in the educational system. The findings of a recent RAND study covering a decade of research on the NAS models revealed significant implementation problems and failures (Berends, Bodilly, & Kirby, 2002). These findings provide growing evidence that we need a better understanding of the *process* of transforming schools and districts, and that no matter how good a design is, it will not succeed in its implementation if a sound transformation process is not used.

Educators and researchers are now calling for the development of *a process* (specific steps and guidance) for systemic change that a school community can use to transform their educational system (Banathy, 1991; Comer et al., 1996; Duffy et al., 2000; Fullan & Stiegelbauer, 1991; Jenlink et al., 1998; Jenlink, Reigeluth, Carr, & Nelson, unpublished manuscript; Reigeluth & Garfinkle, 1994). As emphasized above, much of the school change literature has focused on the product and not on the process of change. In order to design

and implement a totally new educational system, more knowledge is needed

about the *process of systemic change*. The literature review in the next chapter

will bring forth and synthesize what is currently known about the systemic change

process.

CHAPTER 2: LITERATURE REVIEW

Introduction

In this chapter I will develop a conceptual framework of the systemic change process (see Figure 1). The conceptual framework is grounded in the literature on soft systems theory and critical systems theory, and therefore prior to presenting the framework, I will provide a brief overview of the literature on systems theory. The framework will serve as a lens through which to review important educational change efforts and school change models in order to examine whether they address and inform any aspects of the systemic change process outlined in the conceptual framework. Furthermore, my analysis of those efforts and models will be used to test and revise the conceptual framework. Specifically, two important change efforts—the Dalton Plan and the Eight Year Study—and four school change models—the Coalition of Essential Schools (CES), the School Development Program (SDP), Success for All/Roots & Wings (SFA), and the Guidance System for Transforming Education (GSTE)—will be reviewed.

A Brief Overview of Systems Thinking: A Conceptual Grounding

Laszlo and Laszlo (1997), Jackson (1992) and Banathy (1996) have outlined various stages of the evolution of systems thinking. The first stage in the evolution of systems thinking is known as "*hard systems thinking*", which is practiced in engineering fields. In this mode of thinking there is an emphasis on

the scientific and systematic method of thinking about and solving problems. The second stage in the evolution is known as "*organismic systems thinking*", which emerged from the general system theory movement that was developed by systems theorists (Bertalanffy, 1956; Boulding, 1956; Rapoport, 1986). Bertalanffy (1956) emphasized that the open system interacts with its surrounding environment, and that a change in the environment would in effect initiate a change in the system. Additionally, a change in the system would initiate a change in the environment. This notion of the open system has greatly influenced the study of all living systems, including large social systems.

The third stage in the evolution of systems thinking was developed due to the weakness in both hard and organismic systems thinking to solve ill-structured, messy problems found in social systems. This evolution of thinking was named "*soft systems thinking*", and it was developed by Checkland, Ackoff, Churchman and other systems design scholars. Checkland (1993) found that using a hard systems thinking approach to solve complex social problems was neither suitable nor effective. This incompatibility led to his developing a soft systems thinking approach to solving ill-structured social problems. Checkland (1993) characterized the critical difference between 'hard' and 'soft' systems thinking as follows:

The main difference between 'hard' and 'soft' approaches is that where the former can start by asking 'What system has to be engineered to solve this problem?' or 'What system will meet this need?' and can take the

problem or the need as 'given'; the latter has to allow completely

unexpected answers to emerge at later stages. (p. 190)

The fourth stage is a newly emerging branch of soft systems thinking

called "*critical systems thinking*" (CST), which was spearheaded by M.C.

Jackson, Robert Flood, and Werner Ulrich. Banathy (1996) writes: "It [critical

systems thinking] aims to liberate systems theory from the tendency of self

imposed insularity, from the delusions of objectivity, and subjectivity, and to

emancipate people and groups from domination and subjugation evidenced in

social situations" (p. 102). CST emphasizes key areas of commitments: critical

awareness, social awareness, human emancipation, complementarism at the

methodology level, and complementarism at the theory level (Jackson, 1992).

A change process based on CST strives to empower and develop the

critical awareness in a person to analyze the values, assumptions, strengths and

weaknesses of the systemic change process he or she is engaged in.

Furthermore, it is through critical awareness that a person can compare various

systems ideas, methods and theories. A change process based on CST also

strives to build a sense of social awareness in a person, so as to enhance their

understanding of the culture and climate of the system that will most likely have

an affect on the systemic change process. Complementarism at both the

methodology and theory level constitutes a respect for and critical use of diverse

methods and theories to achieve systemic change. Finally, a systemic change

process that is based on CST has a deep commitment to human emancipation.

That is, a key aspect of CST and in particular human emancipation is the pursuit

of equitable representation, participation and capacity building of stakeholders in all aspects of the change process. In summary, Jackson (1995) writes, CST "takes us beyond fragmentation by supplying means through which we can be critical in the use of various systems ideas and methods at our disposal" (p. 40).

The Systemic Change Process: A Conceptual Framework

The conceptual framework of the systemic change process is grounded in and emerges from the soft systems and critical systems thinking ideas that are described in the previous section. In this section I will present a synthesis of the major ideas that have emerged from my own experiences facilitating change in schools, and from an earlier review of the literature, including: (a) the systemic change literature, (b) case studies about educational change efforts, and (c) school change models.

The conceptual framework includes five major aspects that are important for any systemic change process to succeed:

1. broad stakeholder ownership,
2. systems view of education,
3. evolving mindsets about education,
4. understanding the systemic change process, and
5. systems design.
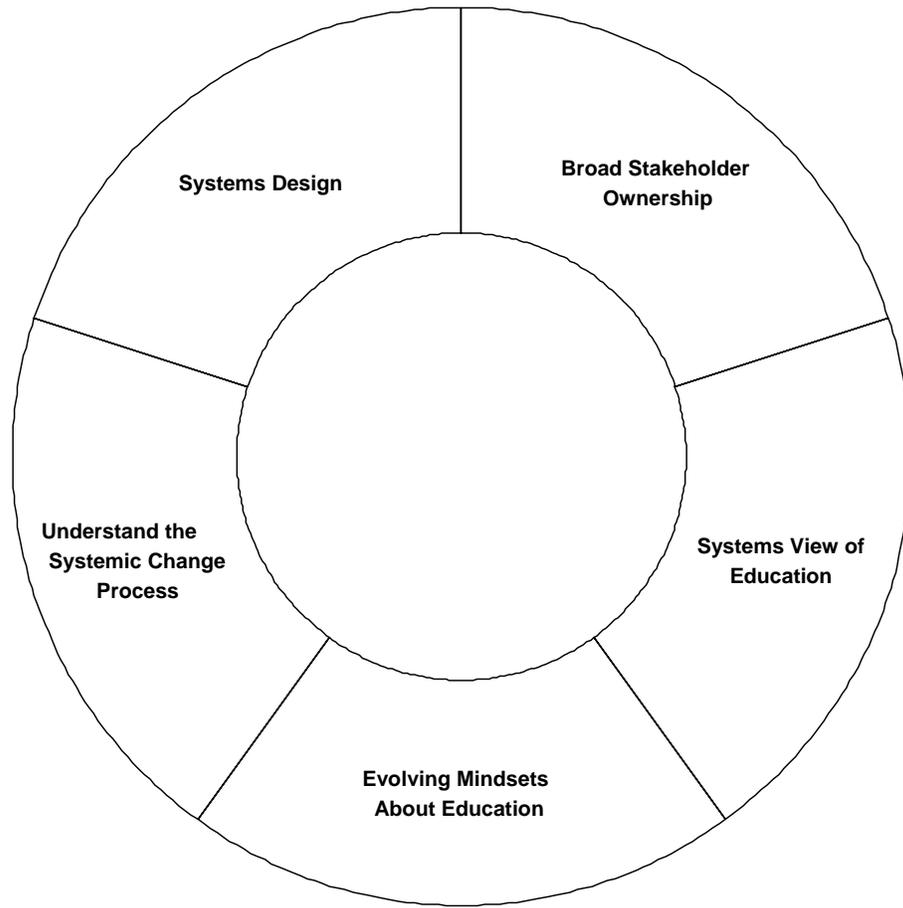
Figure 1: Systemic Change Process: A Conceptual Framework

Broad Stakeholder Ownership

Broad stakeholder ownership is the fundamental bedrock upon which all other aspects of the conceptual framework of the systemic change process are built. Without broad stakeholder ownership, the other elements of the framework described below lose their meaning and sense of purpose in the context of systemic change in education.

Educational stakeholders are the people in a school community (e.g., parents, teachers, students, civil servants, and clergy) that have a vested interest in the school system in their neighborhood. While it may seem obvious why school personnel, parents, and students should be vested in the educational system, what is not so obvious is why individuals who may not have children or work within the system should be vested. A major reason for the vested interest of diverse members of a society is that ideally, a stakeholder in a democracy should be interested in ensuring that every child be provided with the best educational opportunities (Clinton, 1996; Goodlad, 2002), in order to continue the progression of society. The education of our children is directly related to the quality of government, level of crime, and the amount of retirement support (through FICA, and Medicare payments) that all members of our society can expect. These are a few of the reasons why all members of our society should be vested in the educational system. Without this vested interest by a broad and diverse base of stakeholders, the democratic goals of American society are likely to lose their importance and significance.

Recently, with the sense of urgency to change and improve America's

public schools, parents have been asked to join school based management

(SBM) teams. SBM teams give parents the opportunity to get involved in

important matters and to begin to take ownership by being a part of the school

decision-making process (Fine, 1993). In his book *Parental Involvement and the*

Political Principle, Sarason (1995) characterized the political principle with these

words, "when you are going to be affected, directly or indirectly, by a decision,

you should stand in some relationship to the decision making process" (p.7).

Asking parents to be a part of a decision-making process is clearly a step toward

helping parents not only to get *involved,* but also to take *ownership* of a change

process. However, the dialogue surrounding involvement needs to shift from

seeking only parental involvement to seeking and developing broad stakeholder

ownership (Fine, 1993).

Bringing stakeholders together who have diverse backgrounds,

experiences and opinions strengthens the change process. If voices of

stakeholders are left out, particularly the voices of those that have been

historically marginalized, than the change process is weakened and is more

susceptible to adverse reactions from these very same stakeholders.

When it comes to engaging parents and other stakeholders in a systemic

change process, Banathy (1996) expands Sarason's notion of the Political

Principle with this profound statement:

When it comes to the design of social and societal systems of all kinds, it

is the users, the people in the system, who are the experts. Nobody has

the right to design social systems for someone else. It is unethical to design social systems for someone else. Design cannot be legislated, it should not be bought from the expert, and it should not be copied from the design of others. If the privilege of and responsibility for design is "given away," others will take charge of designing our lives and our systems. They will shape our future. (p. 228)

Banathy transcends the political principle based on decision making, to offer a political principle based on designing and seizing ownership of designing a new educational system.

In order for a broad range of stakeholders to feel a sense of ownership in an educational change process, their roles would need to fundamentally change. They would need to not only be involved and help make decisions, but they would also need to become creators, designers and visionaries of a new and fundamentally different educational system. Stakeholders will need to evolve their mindsets, develop a systems view, and understand the systemic change process to be able to begin the process of designing a new educational system. Hence, new types of relationships and opportunities must be created that would allow a broad range of stakeholders to come together to envision, design and implement their ideal educational system. Only then can we say that stakeholders, including parents, have total ownership over their change process and their educational system, because they would have designed it. A key ingredient for a systemic change process in education is broad stakeholder ownership.

Systems View

For years educators have been trying to analyze why their schools are failing by observing the classroom, talking with teachers, parents and principals, and identifying various school indicators of improvement (grades, attendance, parent involvement, suspensions, etc.). These attempts can be characterized as *piecemeal* methods of analysis that have yet to help educators and researchers create fundamental changes in education. In the following passage Fritjof Capra (1982) explains how isolating elements of a system in order to analyze it will in effect destroy our ability to develop a holistic view of the system:

> Systemic properties are destroyed when a system is dissected, either physically or theoretically, into isolated elements. Although we can discern individual parts in any system, the nature of the whole is always different from the mere sum of its parts. (Capra, 1982 p. 267)

Educational stakeholders need to develop a systemic view of educational systems and an understanding of the activity of systems in order to undergo serious systemic change efforts in education. According to Capra (1982), "the activity of systems involves a process known as transaction—the simultaneous and mutually interdependent interaction between multiple components" (p. 267). Developing a systems view requires that we begin to view "the world in terms of relationships and integration" (Capra, 1982, p. 266). Banathy (1992) provides three different explanations for helping us to understand the concept of a "systems view" and its importance to the systemic change process:

- "The systems view helps us to understand the true nature of education as a complex, open, and dynamic human activity system that operates in ever-changing multiple environments and interacts with a variety of societal systems" (p. 17).

- "The systems view is a certain way of looking at ourselves, at the environments we live in, at the systems that surround us, and at those we are a part of" (p. 15).

- "The systems view is a way of thinking, it is a world view we can possess. And there are ways by which it can be developed" (p. 16).

The absence of a systems view can lead to unexpected consequences when educational stakeholders are not aware of the interrelationships that exist within societal systems. It is likely, that developing a systems view will assist in helping people to evolve their mindsets.

In the following subsections, two methods will be presented for helping people to develop a systems view of education: 1) the use of systems models, and 2) the use of metaphors. The first section describes Banathy's (1991) systems models (systems-environment, functions/structure, and process models), and the second section outlines Morgan's (1997) metaphors for viewing organizations. The second section also offers examples of the use of metaphors in the context of education.

Systems Models

Banathy suggests two stages in helping people to develop a systems view of education. The first stage requires that we *observe* and *study* various systems and their behavior, in order to identify the common *concepts*. The first stage also requires that we probe to find relationships among the concepts in order to establish a set of *principles*. According to Banathy (1992), "a system principle emerges from an interaction/integration of related concepts" (p 16). To complete the first stage, we must find relationships among the principles, and these related principles will form the basis for the *systems models* that we create.

The second stage requires that we *internalize* the systems models that we create and *apply* them to a real-life situation that is meaningful to us. One way to apply them is to use them to analyze a particular system. Banathy (1992) has developed three systems models, which he refers to as *lenses*, "that can be used to look at an educational activity system and understand, describe, and analyze it as an open, dynamic, and complex social system" (p. 21).

Systems-Environment Model, also called the *"bird's-eye-view"* lens, allows us to describe an educational system within the context of its larger environment (i.e. community and larger society). The bird's-eye-view allows us to see the existing or future relationships, interactions, and patterns of interdependence the educational system has with its larger environment.

Functions/Structure Model, also called the *"still picture"* lens, allows us to view the state of the educational system at a given point in time. Think of a school system as constantly moving and changing. Now imagine stopping the

motion of the school system to take a close look at the goals and purposes of the system. This lens allows us to examine what functions and structures are in place within the school system that serve to carry out the goals and purposes of the system.

Process Model, also called the *"motion picture"* lens, allows us to examine the behavior of the school system as it changes over time (in the context of the community and larger society). The process lens helps us to understand how the school system receives, assesses and process input, how the system transforms input to meet the purposes and goals of the system, and how the system processes and assesses the outputs.

Banathy emphases the importance of using all three models and that no one model can give a complete systems view of a complex school system in the context of its community and larger society. Educators can learn to acquire a systems view of education by observing various systems (e.g., educational systems) and identifying common concepts from which related principles can emerge, and in turn systems models can be created from these principles. It is only when we internalize and apply the systems models to our own situations that we can truly expect to develop a systems view of education.

Metaphors

In addition to systems models, *metaphors* are also important tools in helping people to see and understand complex systems and to develop a

systems view of education. According to Morgan (1997), "we use metaphor whenever we attempt to understand one element of experience in terms of another" (p. 4). Metaphors can also be useful in helping people to evolve their thinking and mindsets about education. In his book *Images of Organization*, Morgan (1997) presents eight metaphors as models or lenses for viewing, describing, analyzing and understanding organizations systemically:

1. organizations as machines

2. organizations as organisms

3. organizations as brains

4. organizations as cultures

5. organizations as political systems

6. organizations as psychic prisons

7. organizations as flux and transformation

8. organizations as instruments of domination.

No one metaphor can give a total view of the system; therefore, Morgan recommends using a dominant metaphor and other supporting metaphors to give a more accurate depiction of the organization. For example, using the *organizations as political systems* metaphor as the dominant metaphor, "we can analyze organizational politics in a systematic way by focusing on relations between *interests*, *conflict*, and *power*" (p. 160). In analyzing the interests of the stakeholders in the school community, it is important to frame the dialogue around their goals, values, desires, and expectations (Morgan, 1997). According to Morgan (1997), when the interests of various stakeholders collide, you can

expect there will be conflict. Those in power are the ones to resolve the conflicts of interest (Morgan 1997). In school systems, school boards are given the power, by the state, to resolve conflicts that arise within their school districts. The school board makes the final decisions on critical issues within the district.

One can easily use the "*psychic prisons"* metaphor as a supporting metaphor for the political systems metaphor. For example, in addition to being political, it is not common to see a superintendent, school board, teachers, and community members coming together in a collaborative way to work towards a shared vision. The school system is designed in such a way that it does not promote constructive communication amongst the various stakeholder groups. Instead, what exists is a system of "*psychic prisons*", whereby interests, visions, and ideologies are not shared with the entire school community. It is precisely these psychic prisons which form the basic structure of political systems. Stakeholder groups exist in many different secluded realities or psychic prisons, and as such it is difficult to get these groups to suspend and free themselves from their realities in order to experience a new shared reality.

Metaphors can be used as lenses, theories, or systems models in order to help stakeholders develop a systems view of their educational system. Morgan (1997) states that:

> in recognizing theory as metaphor, we quickly appreciate that no single
> theory will ever give us a perfect or all-purpose point of view. We realize
> that the challenge is to become skilled in the art of using metaphor: to find

fresh ways of seeing, understanding, and shaping the situations that we

want to organize and manage. (p. 5)

Helping educational stakeholders to acquire a systems view of education by

helping them work with systems models and organizational metaphors will

facilitate the major work of the systemic change process: *evolving mindsets*.

Evolving Mindsets

There is a socio-cultural and ideological vision that is deeply engrained in

our minds for what we call *school*. When we think of school, or "the grammar of

schooling" (Tyack & Cuban, 1995), we think of a teacher lecturing to a group of

students; we think of textbooks, a black board, chalk, the principal; we think of

having to pass standardized exams, we think of a grade-based, chunked

curriculum, we think of grades and credits (i.e., the Carnegie Unit), and we think

of going to the next grade level. We have been enculturated to view schools in a

certain way, and until we can evolve our mental models of what we believe are

"real schools," we will not achieve fundamental changes in education (Senge,

2000).

One can argue that helping stakeholders to evolve their mindsets and

mental models about education is perhaps the most important aspect of a

systemic change process. The use of the terms mindset, worldview, and

paradigm are all roughly synonymous with the term mental model. Senge (1990)

explains that

Mental models are deeply ingrained assumptions, generalizations or even pictures or images that influence how we understand the world and how we take action. Very often we are not consciously aware of our mental models or the effects they have on our behavior. (p. 8)

The term mindset is preferred here because the term itself defines the major problem we are experiencing in education today. As a society our minds are set in an educational system that is now obsolete. Our minds are set in an obsolete view of what and how a "real school" is supposed to look and function (Tyack & Cuban, 1995). The culture of schooling is deeply ingrained and set in our minds. When one's mind is set, it is nearly impossible to change one's disposition. Yet it is this nearly impossible task of *evolving mindsets* or reculturing (Fullan, 1993; Fullan & Stiegelbauer, 1991) that is the key to successfully transforming the educational system. Whatever term is used, researchers are beginning to agree that the process of systemic change is based on helping people to change and evolve their mindsets about education (Caine & Caine, 1997; Jenlink, 1995).

Understand the Systemic Change Process

All stakeholders should have a deep understanding of the systemic change process. Understanding the systemic change process is the bridge to educational transformation. Communication and dialogue are the vehicles for bringing a diverse group of stakeholders together for a journey toward appreciating diverse stakeholders' values, beliefs and opinions (Jenlink, 2001).

Communication and dialogue among educational stakeholders fosters the

recognition of system relationships in society (i.e., among family, education, and

community). The journey to this deep understanding requires first, an

understanding that the ultimate goal of any systemic change process is to invent

an educational system where all teachers succeed at helping students succeed.

Second, it is important to understand that to invent a fundamentally different

educational system will require helping people to evolve their mindsets about

education (Caine & Caine, 1997; Jenlink, 1995). *Mindset change* is the essence

of a systemic change process. Third, it is also important to understand that

during a systemic change process much of the time is spent in small process

teams (5 – 6 stakeholders) led by a process facilitator (Caine & Caine, 1997;

Jenlink et al., 1998, unpublished manuscript). The major work of the process

teams will be to: (a) develop a deep understanding of the systemic change

process, (b) evolve their mindsets and help the school community to evolve their

mindsets about education through dialogue, and (c) envision, design and

implement an ideal educational system with active involvement of as many

stakeholders as possible.

Fourth, we must understand that it is only through dialogue within process

groups that we can begin to help stakeholders evolve their mindsets about

education. According to Bohm (1996):

The object of a dialogue is not to analyze things, or to win an argument, or

to exchange opinions. Rather, it is to suspend your opinions and to look at

the opinions – to listen to everybody's opinions, to suspend them, and to

see what all that means. (p. 26)

Lastly, understanding the systemic change process requires an understanding of

each of the elements outlined in this conceptual framework.

Systems Design

According to Banathy (1991) "Systems design in the context of any human

system is a future-creating activity. People engage in it based on their vision of

what their system should be. They are 'think future—act now' kind of people" (p.

165). The process of systems design should take stakeholders on a journey from

a current and obsolete educational system to an ideal design of their educational

system. Banathy (1996) advises that the design journey begin by engaging in a

dialogue about why we want to engage in design. He calls this dialogue the

"genesis of design" and outlines five major design processes that should follow

the genesis of design (Banathy, 1996):

- Transcending the existing system and leaving it behind.

- Envisioning an image of the system that we wish to create.

- Designing the system, which, when implemented, transforms the

  existing state to the desired future state.

- Presenting/displaying the model(s) of the system we design.

- Planning for the implementation of the design. (p. 61)

However, prior to actually engaging in a systems design process, Banathy (1991) recommends that stakeholders initiate the process of 'Getting Ready for Design,' which entails:

1) Understand Systems Design

2) Develop Capability and Competence in Design

3) Develop Organizational Capacity for Design

4) Generate Willingness in the Community to Support the Design Effort

5) Prepare a plan for the design inquiry (p. 165)

Banathy (1991) places great value on systems design, and he believes that "systems design is most successful, it is most viable and productive, and commitments to implementing the design are most binding, when it is directed by the users of the future system rather than by outside experts" (p. 166). One way to help stakeholders, the users of the system, build their sense of ownership of the systemic change process, is to help them to "Get Ready for Design."

Systems design requires a thorough understanding of system dynamics. Jay W. Forrester (1999), a pioneer of the field of system dynamics, provides a definition:

> System dynamics deals with how things change through time which covers most of what most people find important. System dynamics involves interpreting real life systems into computer simulation models [STELLA] that allow one to see how the structure and decision-making policies in a system create its behavior. (p. 1)

Forrester argues that system dynamics is the foundation under systems thinking. Teaching and learning about system dynamics by creating computer simulations of systems models can help people to visualize and think effectively about systems (Forrester, 1999).

Both Ackoff (1981) and Banathy (1991, 1996) recommend an "ideal design" approach to systems design. According to Banathy (1996), "in the ideal systems design approach, the target is always the ideal. The target cannot ever be less than ideal…. Design is a journey toward the ideal." (p. 194). Jenlink (1995) states that "systems design is an inseparable part of systemic change; the ideal is in the process of creating, not in the content of the process" (p. 43). For any systemic change process to succeed, it should seek to envision and create an ideal educational system using a systems design approach.

The following section contains a brief review of selected historical educational change efforts and popular school change models found in the school change literature. The conceptual framework presented above will be utilized as a lens to analyze the extent to which each model or effort represents a systemic change process.

School Change Efforts and Models

In their historical case study of major educational change efforts in America, Tyack and Cuban (1995) found that "The Graded School" and "The Carnegie Unit" formed the foundation of how Americans view a "real school" and are a critical part of "the grammar of schooling." Using historical evidence and

case studies of change efforts, Tyack and Cuban illustrated how the grammar of schooling withstood three challenging change efforts: **the Dalton Plan**, **the Eight-Year Study**, and the **High Schools of Tomorrow**. Two of these efforts will be reviewed next in this literature review, the Dalton Plan and the Eight Year Study, to gain insight for why they failed to make fundamental changes in the American educational system. The reasons for the failure of these efforts can have important implications for understanding the process of systemic change in education.

I have chosen not to include a review of the High Schools of Tomorrow because, even though it is a more recent change effort (it occurred in the 1960's - 1970's), it had very similar characteristics and aims to those of the Dalton Plan and the Eight Year Study, and therefore failed for the same reasons. (For a review of the change effort: High Schools of Tomorrow, see Tyack & Cuban, 1995).

Additionally, Five school change models will be reviewed, the **Coalition of Essential Schools (CES)**, **Success for All/Roots & Wings (SFA)**, the **School Development Program (SDP)**, **Knowledge Work Supervision® (KWS)**, and the **Guidance System for Transforming Education (GSTE)**. The CES, SDP and SFA were selected for review because of the attention they have received in the school change literature, and the national popularity that they enjoy. These models, however, have not made significant fundamental changes in the American educational system. The KWS and the GSTE were selected for review because they are different from other models. Both KWS and GSTE have a

process orientation, whereas other models have a product orientation (see chapter 1 for discussion on Product vs. Process Orientation). Also, KWS and GSTE have a level of process detail that other school change models do not offer. Lastly, both the KWS and GSTE were selected for review because they offer guidance for a district-level change process, whereas most other models offer school-level guidance, which is less systemic due to its narrower scope.

The conceptual framework presented above will be used as a lens to analyze the extent to which each model or effort represents a systemic change process. The analysis will be presented in *italic* form, accompanied by a table, following the review of each of the change efforts/models.

The Dalton Plan

It was during the 1920's when Helen Parkhurst created the Dalton Plan (Parkhurst, 1924), which for its time was revolutionary. Parkhurst's goal was to change the traditional structure of "the graded school" and factory model of teaching and learning. According to Lee (2000), Parkhurst was greatly influenced by Maria Montessori's research (Montessori, 1964; Montessori & Claremont, 1967; Montessori, George, & Holmes, 1912) that emphasized creating an educational environment that was child-centered, flexible, and cooperative, where students could learn at their own pace. Parkhurst worked very closely with Montessori, and she was responsible for supervising and training teachers in the Montessori Method. Parkhurst also gave lectures at educational conferences to promote the Montessori Method.

Parkhurst's Dalton plan had three main principles at its foundation: 1) freedom to work without interruption at your own pace, 2) proportion of effort to attainment, and 3) self-organized study time (Time management). Students of the Dalton Plan would have to complete assignments in each subject area that were designed by teachers with expertise in that subject. Monthly student contracts (i.e., personal learning plans) that were negotiated with teachers were a central component of Parkhurst's plan.

According to Tyack and Cuban (1995), schools that adopted the plan could not implement the whole Dalton Plan at once; rather the schools implemented the plan in a piecemeal approach, incorporating aspects of the plan that were appealing and fit the needs of the school. In practice then, the integrity

of the plan was jeopardized due to the piecemeal approach used by the various

schools that attempted to implement the plan. Inevitably attempts at scaling up

(Elmore, 1996) failed, but this was only part of the problem. There was great

resistance from the most important stakeholders: students, parents, and teachers

(Tyack & Cuban, 1995):

- Students complained that fulfilling solitary contracts was more boring
  than regular class work.

- Parents and educators protested that motivation and discipline of
  pupils deteriorated under the Dalton Plan.

- Teachers objected to the massive amount of paper work and time for
  individualization that the plan required. (p. 96)

These findings highlight key components of the conceptual framework of

the systemic change process that were lacking in the effort to implement the

*Dalton plan (see Table 1). Parkhurst held a **systems view** for how her plan*

*needed to be implemented. Unfortunately, due to the lack of **broad stakeholder***

***ownership** of the plan, stakeholders implemented it in a piecemeal fashion.*

Perhaps if the stakeholders had held a systems view of their schools and

recognized the need to implement the Dalton plan in a systemic way, the effort

would have succeeded. Parkhurst's goal was to have all high schools embrace

and implement her plan all at once. Unfortunately, this was never achieved,

because as Tyack and Cuban explain, "It would have fundamentally changed the

standard grammar of secondary schools and required school boards, parents,

educators, and pupils to alter their cultural beliefs about the character of a 'real

school'" (p. 97). It would have required the stakeholders to **evolve their mindsets about education.**

Table 1: Compare Dalton Plan w/Conceptual Framework

Conceptual Framework Model/ Effort	Broad Stakeholder Ownership	Systems View of Education	Evolving Mindsets About Education	Understanding the Systemic Change Process	Systems Design
The Dalton Plan		**1**			

Note. Empty Cell = "No," 1 = "Some," or 2 = "All" Aspects of the Element are Present in This Model/Effort.

The Eight Year Study

Aikin (1942) reported that in 1930, the Progressive Education Association established a Commission on the Relation of School and College "to explore possibilities of better coordination of school and work and to seek an agreement which would provide freedom for secondary schools to attempt fundamental reconstruction" (p. 2). The commission designed what they called "the Eight Year study," which was a study that set out to free 30 secondary schools from the rigid constraints of college admissions requirements, which in turn would give those schools the autonomy to reinvent themselves. Over 200 colleges agreed to participate in the study, waiving all their subject, credit and testing requirements for the 30 high schools. However, admission into one of the colleges was based on the following criteria (Aikin, 1942):

- Recommendation from the principal of the co-operating secondary school to the effect that the graduating student (a) is possessed of the requisite general intelligence to carry on college work creditably; (b) has well-defined, serious interests and purposes; (c) has demonstrated ability to

work successfully in one or more fields of study in which the college offers instruction.

- A carefully recorded history of the student's school life and of his activities and interests, including results of various types of examinations and other evidence of the quality and quantity of the candidate's work, also scores on scholastic aptitude, achievement, and other diagnostic tests given by the schools during the secondary school course. (pp. 12-13)

These thirty schools were free to create innovative structures without the worry or constraint of college entrance requirements. Members of the commission and directing committee did not dictate to the schools what changes they should make. The design work was left up to the individual schools. During a meeting with all the principals and the directing committee of the study, Aikin (1942) quoted one principal who openly and honestly shared her feelings about having this newfound freedom to develop an innovative high school, "My teachers and I do not know what to do with this freedom. It challenges and frightens us. I fear that we have come to *love our chains*." (p. 16).

According to Aikin (1942), there were two major principles that guided the change process for all 30 schools involved in the study. The first principle emphasized using the best research on learning theory to inform the change efforts in the schools. Aikin (1942) states this first principle with these words, "The general life of the school and methods of teaching should conform to what is now known about the ways in which human beings learn and grow" (p. 17).

The second major principle that guided the change efforts in each of the high schools was the need to dialogue about the purpose of education. Aikin (1942) states the principle in this way: "the second major principle which guided the work of the participating schools was that high school in the United States should re-discover its chief reason for existence" (p. 18).

The innovative designs of the 30 experimental schools shared certain common characteristics that began to challenge the features of the grammar of schooling (Tyack & Cuban, 1995):

- Teachers developed core programs that crossed departmental boundaries.
- Teachers varied time periods and sizes of their classes.
- Students spent less time on mainline academic subjects and more on art, music and drama.
- Students participated in community service, artistic productions, publications, and decision making in school affairs.
- Instruction was individualized and student-centered. (p. 99)

The evaluators of the Eight Year study found that, when they compared 1475 matched pairs of students that graduated from traditional secondary schools to students that graduated from the experimental schools,

- The graduates from the experimental schools were not handicapped in their college work.
- Departures from the prescribed pattern of subjects and units did not lessen the student's readiness for the responsibilities of college.

- The students from the experimental schools that made the most

   fundamental curriculum revision achieved in college distinctly higher

   standing than that of students of equal ability with whom they were

   compared.

Given these favorable findings, Tyack and Cuban (1995) state that "In theory,

then, the high schools should have been free to alter the traditional

departmentalization of subjects and other features of the grammar of schooling."

(p. 99).

However, in 1950, eight years after the study was completed, teachers

were tired and overburdened, parents resisted, and the strong hold of the

traditional grammar of schooling returned to many of the experimental schools.

Tyack and Cuban believe that part of the reason for the failure (falling short of

fundamentally changing the grammar of schooling) of the eight year study was

that "progressives were often only a fraction of the total faculties of the

participating schools, and the changes they introduced probably penetrated their

institutions only to a limited extent" (p. 101).

These findings highlight key components of the conceptual framework of

the systemic change process that were lacking in the effort of the Eight Year

Study (see Table 2). Even though there was great political and organizational

support from the top leaders at the school, district, college and university levels,

*the effort lacked **broad stakeholder ownership** and support from parents and*

teachers. Perhaps parents and teachers would not have resisted if they had had

*a different **mindset about education** and what a "real school" should look like.*

*Additionally, the stakeholders did not seem to have an **understanding of the** **systemic change process**, as evidenced by their lack of shared vision, and motivation to continue with the process.*

Table 2: Compare "The Eight Year Study" w/Conceptual Framework

Conceptual Framework Model/ Effort	Broad Stakeholder Ownership	Systems View of Education	Evolving Mindsets About Education	Understanding the Systemic Change Process	Systems Design
The Eight Year Study		2			2

Note. Empty Cell = "No," 1 = "Some," or 2 = "All" Aspects of the Element are Present in This Model/Effort.

In summary both the Dalton Plan and the Eight Year Study teach us that any change effort that ignores the importance of having broad stakeholder ownership, or does not have a process of acquiring broad stakeholder ownership, is bound to fail. Both change efforts also highlight the need to help stakeholders evolve their mindsets about education. This was observed through the stakeholder resistance which was evident in both efforts.

The Coalition of Essential Schools

In 1984 after the publication of *Horace's Compromise: The Dilemma of the American High School*, Sizer (1984) began to articulate principles of schooling that would provide guidelines for a restructured secondary school. Currently, Theodore Sizer's **Coalition of Essential Schools** (CES) promotes "Ten Common Principles," and "Eight Organizational Principles," as foundations to describe the application of a philosophy of schooling (Sizer, 2002).
The Ten Common Principles are:

1. The focus should be on students learning to use their minds well

2. A school's goals should be simple—less is more

3. A school's goals should apply to all students

4. Maximize personalized learning

5. Student as worker, teacher as coach

6. Document with authentic assessment

7. Value expectations, trust and decency, include parental involvement

8. Principal and teachers as generalists first, specialists second

9. Administrative planning with lower student to teacher ratios

10. Honor diversity

The Eight Organizational Principals:

1. Model a learning community

2. Document change efforts

3. Value local wisdom and be flexible

4. Declare the whole school, including the parents, the "fundamental unit of change"

5. Collaborate with others and utilize technologies

6. Be active in reform discourse on the national as well as the local level

7. Model democratic practices and address equity issues

8. Personalize work at all levels

In their five-year ethnographic study of the eight schools that were charter members of the Coalition of Essential Schools, Muncey & McQuillan (1993) reported findings that have implications for the systemic change process. Each

finding is presented next, along with a brief analysis *(in italics)* using the

conceptual framework for the systemic change process.

- Finding 1: In most of the schools there was not a consensus that

  fundamental changes in school structure or teaching practices needed to

  occur.

- Finding 7. Schools assumed that once the faculty "accepted" a reform

  program, there was little need for further reflection on this decision. (pp.

  487-488)

*These findings show that initiating a change effort without **broad stakeholder***

***ownership** of the change process and without creating an understanding of the*

need to change in the first place, can and will only lead to failure to make

fundamental changes in schools.

- Finding 2. The changes that occurred or were considered when a school

  joined the Coalition forced the issue of what constituted the school's

  philosophy and revealed differences in faculty members' perceptions of

  their jobs, of the school's mission, and of the best ways to educate

  students.

- Finding 4. At most schools, a core of faculty members became active in

  their school's reform, but their efforts often ended up dividing the faculty.

  (pp. 487-488)

These findings are most central to any change process, the need to identify

*shared values and beliefs about education, and to begin to **evolve mindsets***

***about education**. In their study, Muncey and McQuillan (1993) reported that "it*

ultimately proved impossible [for the faculty] to reach consensus on the Common

Principles, particularly those related to the appropriate role of teachers…" (p.

487). Many of the CES principles call for fundamental changes in how teachers

teach (e.g., teacher as coach) and how students learn (e.g., personalized

learning), both of which require fundamental changes in their mindsets. Many

teachers and students will be resistant to these new instructional methods and

therefore will need time to evolve their mindsets through dialogue and

professional development.

- Finding 3. The usual starting points for reform were principles that
  individual teachers (or small teams of teachers) could attempt to apply
  with little disruption to the school as a whole.

- Finding 6. The divisions created within schools as a result of Coalition
  membership restricted communication among faculty, and responses to
  changes were often based on hearsay. (pp. 487-488)

These findings highlight the lack of an understanding of how systems work, and

*emphasize the importance of developing a **systemic view** of a school system.*

They also point to the importance of understanding that what an individual

teacher implements in her classroom can and will have resounding effects on the

school as whole. Lastly, these findings again point to the importance of attaining

***broad stakeholder ownership** and involvement at the outset of the change*

effort.

- Finding 5. Most Coalition supporters were naïve about the degree to which school reform could be affected by focusing on academic concerns and about issues of power and politics within their schools. (p. 488)

This finding highlights the need for all those involved in a change process to **understand the process***, and its systemic nature. Focusing on one aspect of the process while ignoring other aspects can cause the entire change effort to fail.*

Muncey and McQuillan (1993) found that many of the CES change efforts were not successful, and the analysis above shows that the efforts failed because they lacked all the key elements of a systemic change process that are outlined in the framework: broad stakeholder ownership, evolving mindsets, understanding the systemic change process, systems view, and systems design (see Table 3).

Table 3: Compare "CES" w/Conceptual Framework

Conceptual Framework Model/ Effort	Broad Stakeholder Ownership	Systems View of Education	Evolving Mindsets About Education	Understanding the Systemic Change Process	Systems Design
The Coalition of Essential Schools					

Note. Empty Cell = "No," 1 = "Some," or 2 = "All" Aspects of the Element are Present in This Model/Effort.

Success For All/Roots & Wings

Other models have focused on changing the school through the curriculum. For example, ***Success For All*** (SFA) is a comprehensive school-wide change model "which combines research-based preschool programs, kindergarten programs, and elementary-age programs in reading, writing, and language arts with one-to-one tutoring for first graders failing in reading, family support activities, and other elements" (Slavin & Madden, 2001 p. 9). SFA was developed by a group of researchers at Johns Hopkins University, including Robert E. Slavin and Nancy A. Madden. The components of SFA include a reading curriculum, eight-week reading assessments, reading tutors, preschool and kindergarten, family support team, program facilitator, teachers and teacher training, and an advisory committee. In 1992 the SFA researchers received a grant from the ***New American Schools Development Corporation*** (NAS) to create a comprehensive design for 21st century elementary schools (Stringfield et al., 1996). The school change model they designed for NAS was called ***Roots & Wings***. Roots & Wings was one of seven change models that were chosen to scale-up—bring their design to a large number of schools. The design of Roots & Wings includes all the components of SFA and in addition includes a mathematics curriculum, MathWings, and a curriculum that integrates social studies, science and writing, called WorldLab.

The SFA and its extension Roots & Wings have one underlying principle, that every child can and will learn to read. Unique in their model is their focus on preschool, kindergarten and elementary grades. SFA requires schools to focus

their resources on ensuring that every child is successful in learning to read. In essence, the focus is on change products, not the change process.

Slavin's Success For All is an example of a model that provides specific reading curriculum guidance, but does not address the systemic process issues outlined in the conceptual framework developed above. To date, research on the effectiveness of the SFA/Roots & Wings program has been measured by how well students score on standardized examinations. Similarly, much of the research that is available on other school change models is limited to reporting quantitative results on how well particular schools were at implementing a particular change model, as indicated by test scores (Cuban, 1984; Haynes, Emmons, Gebreyesus, & Ben-Avie, 1996). There is little qualitative research available that reports results on how the school change models were implemented in the school or district settings. Some researchers question the effectiveness of SFA, and suggest that the findings are unsubstantiated (Pogrow, 2000).

The SFA model does not explicitly address any aspects of the conceptual framework for the systemic change process (see Table 4). First it does not include broad stakeholder ownership, because buying a pre-packaged model leaves people out of the design process. Secondly, the emphasis on the product, test scores, prohibits the development of a systemic view and evolving one's mindset. Lastly, using test scores to evaluate the effectiveness of the model ignores a fundamental goal of the systemic change process, transforming the educational system.

Table 4: Compare "SFA" w/Conceptual Framework

Conceptual Framework Model/ Effort	Broad Stakeholder Ownership	Systems View of Education	Evolving Mindsets About Education	Understanding the Systemic Change Process	Systems Design
Success For All/Roots & Wings					

Note. Empty Cell = "No," 1 = "Some," or 2 = "All" Aspects of the Element are Present in This Model/Effort.

The review and analysis presented in the previous sections of the Dalton Plan, the Eight Year Study, the Coalition of Essential Schools, and Success For All/Roots & Wings highlight the weaknesses in these models/efforts in offering educational stakeholders a process to help guide a fundamental, systemic change in their school system. Specifically, they all lacked a focus on broad stakeholder ownership, evolving mindsets about education, and understanding the systemic change process. With the exception of the Dalton Plan and the Eight Year Study, they all lacked a focus on a systems view of education. Lastly with the exception of the Eight Year Study, they all lacked a focus on systems design. When observed individually and in total through the lens of the conceptual framework, these models/efforts clearly do not represent a systemic change process.

The works of Fullan and Stiegelbauer (1991), Banathy (1991), Schlechty (1990) and many other researchers have provided us with general process theories for changing our school systems. However, many of these theories have not provided practitioners with the level of guidance and support needed to

sustain a long-term systemic change effort. Additionally, many of these theories have focused on the individual school as the unit of change, as opposed to focusing on the district and community levels. The most detailed design theories for district-wide systemic change that this researcher has found to date are the School Development Program (Comer, Ben-Avie, Haynes, & Joyner, 1999; Comer et al., 1996), the Knowledge Work Supervision® (Duffy et al., 2000), and the Guidance System for Transforming Education (Jenlink, Reigeluth, Carr, & Nelson, 1996; Jenlink et al., 1998, unpublished manuscript). These three models will be reviewed in the following sections.

The School Development Program

Comer, Haynes, Joyner and Ben-Avie (1996) have found parental involvement to be a "critical missing link in education reform" (p. 9). The *School Development Program* (SDP), also known as the Comer Process for Change, advocates for "parents and families [to be] at the center of change" (Comer et al. 1996, p. 9). The SDP was developed at the Yale Child Study Center in 1968 by Dr. James Comer, to help stakeholders understand the interactions that take place in the schools, and to train stakeholders to organize and manage their schools in ways that support the overall development of the child.

The SDP model helps stakeholders to develop a systems view of their school by beginning to look at "how the families and communities around that school building and central office all influence life within both school life and learning" (p. 5). At the foundation of the SDP is a theoretical framework that

helps school communities to develop a systemic view of child development. Comer calls his theoretical framework for the SDP, "The Six Developmental Pathways." He explains that, "although the child is a seamless whole, a high level of development along the [1] physical, [2] cognitive, [3] psychological, [4] language, [5] social, and [6] ethical pathways is critical for academic learning" (p. 15). The physical development pathway encompasses the other five pathways. Comer states that an "overemphasis on one pathway to the detriment of the others promotes uneven development" of the child (p. 17).

The school staff and the stakeholders organize themselves into three teams, which are the key components of the SDP. 1) The School Planning and Management Team (SPMT), 2) the Parent Team (PT), and 3) the Student and Staff Support Team (SSST). These teams are referred to as the *three mechanisms* of the SDP process. The process is driven by *three guiding principles* – consensus, collaboration, and no-fault. The three key operations are led by the SPMT: The comprehensive school plan, staff development, and monitoring and assessment.

The SDP provides a level of guidance that both the CES and SFA models do not provide. For example, the CES provides a picture (via principles) of what an ideal school should look like, but does not give any guidance for how one might create this ideal school. The responsibility is left to the school to figure out how to implement the CES principles. The SDP, on the other hand, does not provide a picture of what the ideal school should be, rather the model provides a change process, that assumes if a school focuses all its' resources on the 'Six

Developmental Pathways,' then significant educational achievement gains are bound to follow.

Comer refers to his change process as a "life cycle." Comer et al. (1996) have outlined five phases in the SDP life cycle (see Figure 2): (1) planning and preorientation, which is the preparation at the district level for the implementation of the SDP; (2) orientation, during which

Figure 2: Phases in the implementation of the SDP life cycle.

Phase One
(Lasting 6 months - 1 year)
Planning and Preorientation

1. Central office agreements and commitments

2. Establishment of a steering committee at the district level

3. Description and discussion of the nine SDP elements (mechanisms, operations, guiding principles)

4. Selection and orientation of facilitator and/or district liaison

Phase Two
(beginning in Year 1 or 2)
Orientation

5. Baseline data collection

6. Training of facilitators, school staff, and parents

7. Establishment and training of the three teams

8. Orientation of key district personnel

9. Process documentation

10. Principals' Academy

Phase Three
(beginning in Year 2 or 3)
Transition

11. Nine elements are in place and practiced

12. Continuation of process documentation

13. Follow-up consultation

Phase Four
(beginning in Year 3 or 4)
Operation

14. Increased self-sufficiency

15. Continuation of process documentation

16. Outcomes assessment

Phase Five
(beginning in Year 4 or 5)
Institutionalization

17. Integration of SDP into the total operations of the school

18. Local training and wider dissemination

19. Summative assessment

20. Periodic process and outcomes monitoring

Note. From Rallying the Whole Village (p. 140), by Comer et al., 1996, Teachers College, Columbia University

information about the SDP is disseminated, and individuals become acquainted with the mission, goals, philosophy, and nine elements of the program; (3) transition, involving the establishment and refinement of the nine SDP elements; (4) operation, during which the nine elements are in place and working efficiently; and (5) institutionalization, which reflects the infusion and saturation of the philosophy and elements of the SDP throughout the school (p. 139).

In 1993 Haynes et al. (1996) conducted an ethnographic study to investigate how 10 school sites implemented the SDP. They found the following conditions facilitated the implementation of the change process outlined in the SDP: (1) direct SDP and district-level collaboration, (2) positive inter-personal relationships, (3) facilitators' knowledge and use of preexisting change mechanisms in the schools, and (4) parent and student participation.

Furthermore, Haynes et al. (1996) found the following conditions hindered the implementation of the SDP: (1) staff members' negative experiences with previous school reform programs, (2) staff members' lack of desire to change, (3) low interaction comfort level between parents and staff, and (4) teachers' resistance to parent involvement.

*The conditions that facilitated the implementation of the Comer change process confirmed the importance of having **broad stakeholder ownership** (see Table 5). As mentioned earlier, the SDP helps the school community develop a **systems view** of their school community and each individual child.*

The conditions that hindered the implementation of the Comer change process emphasize the need for facilitators to spend ample time developing all

*stakeholders' **understanding of the change process**, and to work on **evolving***

their mindsets about education.

Table 5: Compare "SDP" w/Conceptual Framework

Conceptual Framework Model/ Effort	Broad Stakeholder Ownership	Systems View of Education	Evolving Mindsets About Education	Understanding the Systemic Change Process	Systems Design
The School Development Program	1	2		1	

Note. Empty Cell = "No," 1 = "Some," or 2 = "All" Aspects of the Element are Present in This Model/Effort.

Knowledge Work Supervision®

Duffy, Rogerson and Blick (2000) have developed what they characterize as "an innovative methodology for redesigning entire school systems" (p. xv). According to Duffy et al. (2000), **Knowledge Work Supervision** (KWS) "is a new strategic, comprehensive, systemic and systematic approach that can transform school systems in fundamental ways" (p. 4). At the foundation of KWS are three sets of principles (see Table 6 for a complete listing of the principles) that are necessary for systemic change (Duffy et al., 2000):

   (a) how systems change and innovate

   (b) working with individuals and groups during innovation, and

   (c) necessary traits, attitudes, and skills for people who facilitate innovation

       (p. 75)

Table 6: KWS Principles

Set 1: Essential System Principles- How Systems Change and Innovate	Set 2: Essential Interpersonal Principles	Set 3: Essential Facilitation Principles
1. Be Clear in Differentiating "the System" From its Environment	**1.** Participation Creates Ownership and Support for Innovation	**1.** Know the Difference Between Being an Expert and Being a Facilitator
2. Schools of the Future Must Be Learning Organizations	**2.** People Need Both Structure and Freedom to Stay in a Work Mode During Innovation	**2.** Recognize Your Strengths as Well as Your Weaknesses and Ask for Support When You Need It.
3. Innovation is a Process to Be Managed Rather Than a Problem to Be Solved	**3.** Change is What Happens to Systems, and Transitions Are the Human (and Much Slower) Side of Change	**3.** Know When and How to Use Outside Experts and When Not to Use Them
4. Encourage "Solutioning" and Puzzle Solving for the Future Rather Than Problem Solving	**4.** People Differ in Their Response to Innovation and Their Willingness to Embrace it	**4.** The Role of the Innovator Is to Start and Encourage the Process of Change, Then Give It Away—Successful long-Term Change Is Sustained by the System Rather Than by a Person or Position
5. Successful Change Require Vision, Capacity, Ownership, and Support	**5.** How You View Innovation and Change Depends Upon Where You Are in the System	**5.** Build Upon Existing Strengths and Past Success
6. There Are Three Interlocking Areas of Organizational Improvement- Work Processes, Social Architecture, and Environmental Relations	**6.** Identify and Give Voice to People Who Have Passion and Commitment for a Positive Future	**6.** Nourish Your Sense of Humor and an Appreciation for Seeking, Rather Than Reaching, and Ideal World
	7. Connect With Support and Leadership Wherever You Find It, While Constantly Striving to Build Commitment for Innovation Among the "Powers That Be"	

Note. Adapted from "Redesigning America's Schools: A Systems Approach to Improvement" by Duffy et al. (2000).

There are five key players for KWS, without whom the process will fail: (1) Strategic Leadership Team, is responsible for managing and building motivation and support for the change process. Duffy et al (2000) recommend that this team be composed of the superintendent and his trusted assistant, teachers, building administrators and a Knowledge Work Coordinator; (2) Knowledge Work Coordinator, who has the major responsibility of coordinating the communication among all the stakeholders; (3) Cluster Improvement Teams, "provide leadership for redesigning their clusters" (p. 179). This team is comprised of building administrators and teachers; (4) Site Improvement Teams, are the change agents within their school building. This team is comprised of building principals and teachers; and (5) Communities of Practice, are according to Duffy et al. (2000), formed, disbanded and reformed in order to create and disseminate professional knowledge throughout the school and district community.

Duffy et al. (2000) have outlined four major phases in the KWS process:

Phase 1: Building Support for Innovation

Phase 2: Redesigning for High Performance

Phase 3: Achieving Stability and Diffusion

Phase 4: Sustaining School Improvement

Within each phase there are a series of steps or activities that are recommended to be performed to achieve the goals and purposes of that phase.

Until this point, the models/efforts reviewed have been implemented in various school districts around the country. To date, KWS (and the GSTE,

reviewed in the next section) has not been implemented and tested in the context

of a school district.

The KWS principles and process address some elements of the

conceptual framework (see Table 7). KWS has at its foundation a set of

principles that clearly address critical elements of the conceptual framework.

*These principles serve as a starting point in helping stakeholders to **understand***

***the systemic change process**. The principles also emphasize the need to have*

*a **systems view of education**, and **broad stakeholder ownership** and support.*

The phases in the KWS process address some elements of the conceptual

framework. For example, Phase 2 (Redesigning for High Performance),

*emphasizes and outlines a **systems design** process for redesigning the*

educational system. The one aspect of the conceptual framework that was not

readily identifiable from the KWS process was the notion of helping stakeholders

*to **evolve their mindsets about education**. Not addressing this critical aspect of*

systemic change within the process can lead to strong resistance from

educational stakeholders.

Table 7: Compare KWS w/Conceptual Framework

Conceptual Framework Model/ Effort	Broad Stakeholder Ownership	Systems View of Education	Evolving Mindsets About Education	Understanding the Systemic Change Process	Systems Design
Knowledge Work Supervision®	2	2		2	2

Note. Empty Cell = "No," 1 = "Some," or 2 = "All" Aspects of the Element are Present in This Model/Effort.

Guidance System for Transforming Education (GSTE)

The *Guidance System for Transforming Education (GSTE)* (Jenlink et al., 1996, 1998, unpublished manuscript) is a design theory for facilitating systemic change. According to Reigeluth (1999), "Design theories are intended to provide direct guidance to practitioners about what methods to use to attain different goals…" (p. 8). The GSTE is comprised of "discrete events," (see Table 8) which are a chronological series of activities for engaging in systemic change, and "continuous events," which are activities that must be addressed continuously throughout much or all of the change process (Jenlink et al., 1998). The **discrete events** for the systemic change process fall into the following **five phases**:

Phase I. Assess Readiness and Negotiate an Agreement. During this phase, the facilitator assesses his or her level of readiness to guide a systemic change effort in a school district. Then the facilitator begins to establish a relationship with a school district, and determines whether the district is at a sufficient level of readiness for a systemic change effort. If both the school district and the facilitator are at a sufficient level of readiness and are committed to working with one another, then they negotiate a formal agreement.

Phase II. Prepare a Core Team for the Change Process. Once a formal agreement has been signed, the facilitator should guide the school district in forming a "Core Team" to initiate the change process. The members of the Core Team should be well respected, opinion leaders of their respective stakeholder groups. The Core Team should be small, preferably one leader from each of the

major stakeholder groups (e.g., the superintendent, one board member, one

parent, the teachers' association president, etc.).

   Phase III. Prepare Expanded Teams for the Process. During this

phase the Core Team expands into two teams. One team is for political support.

It should be large (about 25

Table 8: Discrete Events of the GSTE

Phase I – Assess Readiness and Capacity
Event 1: Assess and Enhance your Readiness to be a Facilitator
Event 2: Establish or Redefine a Relationship with a School District
Event 3: Assess District's Readiness for change and Negotiate a Formal
      Agreement
Event 4: Assess the district's capacity for change

Phase II: Prepare Core Team
Event 5: Select the Participants for the Core Team
Event 6: Create the Core Team dynamic
Event 7: Capacitate the initial Core Team in systems design
Event 8: Design Events 9 - 11
Event 9: Identify Competing Change Efforts
Event 10: Evaluate Openness to Change
Event 11: Evaluate the Existing Culture for Change
Event 12: Design the Process for Expanding the Core Team

Phase III: Prepare the Expanded Teams
Event 13: Expand and build the Decisioning Team
Event 14: Select and build the Design Team
Event 15: Capacitate and enculturate the design team
Event 16: Redesign the Change Process

Phase IV: Design a New System
Event 17: Evolve Mindsets About Education
Event 18: Explore Ideal Beliefs and Assumptions about Education
Event 19: Select and Build Multiple Design Teams
Event 20: Explore Ideal Visions Based on Common Beliefs
Event 21: Develop a System for Evaluating the Results of the Change Process
Event 22: Design a System of Functions for each Ideal Vision
Event 23: Design the Components for Accomplishing each Function
Event 24: Design the Administrative and Governance Systems

Phase V: Implement and Evolve the New System
Event 25: Develop an implementation process for evolving to the new system
Event 26: Evolve, Evaluate, and Revise the New System

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people), and should be comprised of highly respected representatives (opinion leaders) of the various stakeholder groups. This team is called the Decisioning Team, for it is entrusted with making the decisions about the changes; and this is the team that the Core Team usually expands into first. The second team is responsible for creating a shared vision of the "new" system and working out details to ensure its success. It should be small (about 7 - 10 people), and should be comprised of well respected, creative thinkers. This team is called the Design Team.

Phase IV. Engage in Design of a New Educational System. This phase is probably the most intensive of all the phases, because it requires all those involved to share their beliefs about education. Here stakeholders must come together to envision their ideal educational system.

Phase V. Implement and Evolve the New System. Once the ideal system has been generated and approved, the community develops an implementation process for gradually evolving the current system ever closer to the ideal.

The **continuous events** address 18 concerns: 1. Evaluate and improve the change process. 2. Build and maintain political support. 3. Sustain motivation. 4. Develop and sustain appropriate leadership. 5. Build and maintain trust. 6. Evolve mindset and culture. 7. Periodically secure necessary resources. 8. Develop skills in systems thinking. 9. Periodically and appropriately allocate necessary resources. 10. Develop group-process and team-building skills. 11. Build team spirit. 12. Engage in self-disclosure. 13. Engage in reflection. 14.

Develop design skills. 15. Communicate with stakeholders (2-way). 16. Build and evolve community. 17. Foster organizational learning. 18. Build an organizational memory.

Furthermore, there is a clearly identified **set of values** upon which the guidance system is based. The values underlying the guidance system include: caring for children and their future, systemic thinking, inclusivity, stakeholder ownership, co-evolution, facilitator, process orientation, context, time, space, participant commitment, respect, responsibility, readiness, collaboration, community, vision, wholeness, language, conversation, democracy, and culture.

Each of the five phases addresses some elements of the conceptual framework (see Table 9). The first phase requires a facilitator to have an ***understanding of the systemic change process****, and the importance of* ***broad stakeholder involvement*** *when initiating a change effort.   The second phase requires the facilitator to begin to prepare the Core Team of stakeholders by introducing them to the concepts outlined in the framework (through scaffolding), and helping them to apply the concepts to their district. Once the scaffolding process is complete, the third phase involves the Core Team in taking on the ownership of their change process, and transferring the culture and knowledge of the systemic change process that they have developed to the expanded Decisioning Team. The fourth phase engages the Decisioning and Design Teams in* ***systems design****. Systems Design is an element in the conceptual framework that was not a part of any of the educational change efforts and models described above. However, systems design is a critical component of the*

process outlined in the GSTE. Once the fifth phase is reached, all the elements

of the conceptual framework should be a part of the culture of the school district,

therefore allowing the district to implement and evolve their new educational

system.

Table 9: Compare GSTE w/Conceptual Framework

Conceptual Framework Model/ Effort	Broad Stakeholder Ownership	Systems View of Education	Evolving Mindsets About Education	Understanding the Systemic Change Process	Systems Design
Guidance System for Transforming Education	2	2	2	2	2

Note. Empty Cell = "No," 1 = "Some," or 2 = "All" Aspects of the Element are Present in This Model/Effort.

The State of our Knowledge

The educational change literature is severely lacking empirical studies on the process of systemic change. The Dalton Plan and the Eight Year Study did not succeed in fundamentally changing the "grammar of schooling," because they lacked a process for gaining broad stakeholder ownership and they did not address the need to help stakeholders evolve their mindsets about education (see Table 10 for a summary of the analysis of the models/efforts in this literature review). Missing from the literature is how to help stakeholders develop competence in systems design, a critical skill that will be required for designing and reinventing a new educational system. The educational change literature is also severely lacking empirical studies conducted at the district level. As stated above, the GSTE is currently in its developmental stages, and it has never been field tested in the context for which it was designed, a school district. Therefore, field testing the GSTE in the context of a school district would not only help in its

development, but it would also make a significant contribution to the literature

and to our knowledge of the process of systemic change.

Table 10: Summary Comparison of Change Efforts w/ Conceptual Framework

Conceptual Framework Model/ Effort	Broad Stakeholder Ownership	Systems View of Education	Evolving Mindsets About Education	Understanding the Systemic Change Process	Systems Design
The Dalton Plan		1			
The Eight Year Study		2			2
The Coalition of Essential Schools					
Success For All/Roots & Wings					
The School Development Program	1	2		1	
Knowledge Work Supervision®	2	2		2	2
Guidance System for Transforming Education	2	2	2	2	2

Note. Empty Cell = "No," 1 = "Some," or 2 = "All" Aspects of the Element are Present in This Model/Effort.

Purpose of the Study

Therefore, the purpose of this study is to test and improve the process guidelines that are described in the GSTE. Since the GSTE is designed to be carried out over a 3-5 year period, the scope of this study will be limited to three discrete events that are a part of Phase II (Prepare the Core Team for the Change Process). Specifically, the three events to be studied are:

1. Event 5. Select the Participants for the Core Team

The event offers guidance (selection criteria and selection process) on how to form a Core Team of five to seven key stakeholders and opinion leaders who will be responsible for creating a school district culture that embraces systemic change.

2. Event 6. Create the Core Team Dynamic

The event offers guidance on how to design and implement a retreat experience for the Core Team. The purpose of the retreat is to begin to build capabilities within the Core Team related to trust, team building, group process, understanding the systemic change process, and systems thinking.

3. Event 7. Capacitate the initial Core Team in Systems Design

The event offers guidance on how to help build the Core Team's knowledge base in systems thinking, educational systems design, systems dynamics, and the change process.

Events 5, 6 and 7 were chosen as the focus of this study because they offer guidance on how to form and develop a Core Team of key leaders and

stakeholders in the school district. This Core Team is arguably one of the most important components in the GSTE. The members of the Core Team will be the main change agents for their school district, and they will be responsible for creating and developing a culture of change in the school community. The Core Team can either make or break the entire change effort, and therefore studying the process outlined in the GSTE for how to form and develop a Core Team, will make a significant contribution to the systemic change literature.

Research Questions

The following research questions will serve as a guide for the study:

1. What guidelines of Phase II worked well in this particular district-wide effort?

2. What guidelines did not work well in this effort, and should they have been omitted or revised for this effort? If revised, what revisions worked well, or would likely have worked well, in this effort?

3. What new activities were tried that worked well in this effort and therefore should have been in the GSTE for this effort?

4. What criteria were most helpful in judging what "worked well" in this change effort?

5. What "situationalities" (aspects of this particular case, see Reigeluth, 1999) may influence when any guidelines should and should not be used in other change efforts or what the guidelines should be like in other change efforts?

CHAPTER 3: METHODOLOGY

Introduction

This study utilized a qualitative research methodology known as formative research in order to improve upon an existing design theory for facilitating systemic change in public school districts. In this chapter I will first examine the philosophical foundations of inquiry, and some assumptions of qualitative research. Then I will provide a detailed review of the formative research methodology and the study design. Finally, I will discuss methodological issues that relate to the formative research methodology.

Philosophical Foundations of Inquiry

Paradigms of inquiry all have basic beliefs and assumptions that help guide the researcher in choosing the research methodology he or she feels comfortable working with. Guba and Lincoln (1998) have provided researchers with a framework of questions that, when answered, highlight the basic beliefs and assumptions that underlie each paradigm of inquiry (i.e. positivism, post-positivism, critical theory, constructivism and participatory). More importantly they allow researchers to identify the major philosophical differences among the paradigms of inquiry. The questions address three issues:

1. *The ontological issue*: What is the form and nature of reality and what can be known about it?

2. *The epistemological issue*: What is the nature of the relationship between the knower or would-be knower and what can be known?

3. *The methodological issue*: How can the inquirer (would-be knower) go about finding out whatever he or she believes can be known? (p. 201)

For the positivist, ontologically, reality exists somewhere out in the universe, and apart from the researcher. Epistemologically, the relationship between the researcher and the subject of research is objective and they are independent of each other so as to minimize any bias. Methodologically, experiments are designed and variables are manipulated to test hypotheses (e.g., A bowling ball and a feather will fall at the same rate when dropped from the top of a building; The earth is flat; The earth revolves around the sun.)

In contrast, constructivists, ontologically, reject the positivist notion of "scientific realism—the view that our theories chart, map, or refer to real features of the world" (Schwandt, 1997 p. 20), and embrace the notion of people coming together to socially co-construct and make meaning of their realities. Epistemologically, constructivists reject the positivist notion of "scientific objectivity—when it is defined as accurate representation of the way the world really is" (Schwandt, 1997 p. 20). Constructivists view the relationship between the researcher and the subject of research as subjective, the researcher and the subject depend on each other to socially construct and make meaning and arrive at a consensus on what is real in their context and situation.

The rationale for choosing a qualitative research methodology for this research study was based on two factors: 1) the nature of the phenomena that

the researcher was studying: a change process, and 2) the basic belief system or worldview that guided the research: a constructivist paradigm of inquiry. In choosing a constructivist paradigm of inquiry, the researcher understood that the change process is a complex and ever-changing activity. Additionally, the researcher understood that helping stakeholders to evolve their mindsets about education is perhaps the most important aspect of a systemic change process. The process of evolving mindsets requires the researcher and the subject to negotiate their values, belief systems and realities about education through dialogue. The researcher believed that capturing this process using a qualitative research methodology was most appropriate for this dissertation study.

Qualitative Assumptions

According to Merriam (1998) "the key philosophical assumption … upon which all types of qualitative research are based is the view that reality is constructed by individuals interacting with their social worlds" (p. 20). Merriam (1988; 1998) and Creswell (1994) outline several additional underlying assumptions and characteristics of qualitative research:

- Qualitative researchers are interested in understanding the meaning people have constructed.

- Reality is holistic, multidimensional, and ever-changing; it is not a single, fixed, objective phenomenon waiting to be discovered, observed, and measured as in quantitative research.

- The researcher is the primary instrument for data collection and analysis.

- Qualitative research usually involves fieldwork.

- Qualitative research primarily employs an inductive research strategy.

- Qualitative research focuses on process.

- The product of a qualitative study is richly descriptive.

- The design of a qualitative study is emergent and flexible.

Formative Research Methodology

As mentioned earlier, the purpose and focus of this study was to further develop the GSTE, a guidance system for facilitating systemic change in public school districts. To improve the guidance available to school systems interested in systemic change, developmental research is needed. In this research study, formative research was utilized as a form of developmental research or action research in order to recommend improvements for the GSTE. The formative research methodology (Reigeluth & Frick, 1999) is similar to "design experiments" (Greeno, Collins, & Resnick, 1996), but is intended to identify potential improvements for a design theory (or guidance system) by finding ways to improve a case that is conducted according to that design theory. Reigeluth and Frick (1999) "have drawn from formative evaluation and case study research methodologies in the development of formative research methods" (p. 634).

According to Reigeluth and Frick (1999), there are two major kinds of formative research studies one might conduct: 1) a designed case study, and 2) a naturalistic case study. In distinguishing between a designed and a naturalistic case study, Reigeluth and Frick (1999) note that:

Formative research is a **designed case** if the researcher instantiates the theory (or model) and then formatively evaluates the instantiation. Alternatively, it is a **naturalistic case** if the researcher (a) picks an instance (or case) that was not specifically designed according to the theory but serves the same goals and contexts as the theory, (b) analyzes the instance to see in what ways it is consistent with the theory, what guidelines it fails to implement, and what valuable elements it has that are not present in the theory, and (c) formatively evaluates that instance to identify how each consistent element might be improved, whether each absent element might represent an improvement in the instance, and whether removing the elements unique to the instance might be detrimental. (p. 637)

This case study was a designed case because the researcher instantiated (applied) a theory and then formatively evaluated the instantiation in the context of a school district.

According to Reigeluth and Frick (1999), the methodology to conduct this kind of formative research requires the following six steps:

1. *Select a design theory.*
2. *Design an instance of the theory.*
3. *Collect and analyze formative data on the instance.*
4. *Revise the instance.*
5. *Repeat the data collection and revision cycle.*
6. *Offer tentative revisions for the theory.*

The following section will provide greater detail on each of the six steps of the formative research design used in this study.

Formative Research Study Design

Select a design theory.

Reigeluth and Frick (1999) explain that in selecting a design theory it is important to choose one that "you want to improve" (p. 639). For this case study, the researcher selected the Jenlink et al. (1998; in final preparation) GSTE, which was designed to offer guidance to facilitators working with school districts. Refer to chapter 2 for a detailed review of the GSTE. The GSTE is a design theory that is still in its developmental stages. It is a design theory that is intended to provide educators with detailed guidance on "how-to" transform public school districts. The purpose of selecting the GSTE for this study was to field test and improve the guidance it offered. The scope of this dissertation study covered three discrete events that were part of Phase II (Prepare the Core Team for the Change Process) of the guidance system. In particular, the three events studied in this dissertation were:

1. Event 5 Select the Participants for the Core Team

2. Event 6 Create the Core Team Dynamic

3. Event 7 Capacitate the initial Core Team in Systems Design

Design an instance of the theory.

Since the research questions (and the GSTE) were concerned with district-wide systemic change, the application of the theory was conducted in a school district rather than an individual school. In this section a brief description

of the district and the district selection process will be provided, followed by how the researcher field tested the three discrete events within the district.

In December 2000, the Indiana Urban Schools Association announced to all its members that Indiana University was interested in facilitating a district-wide systemic change effort. Four superintendents contacted the co-facilitators (one of whom is the researcher) with expressions of interest. After phone interviews with the superintendents, one district emerged as having a higher level of readiness for systemic change than the others and being more conveniently located. On-site interviews with the superintendent, administrators, parent leaders, principals, teachers' association, and school board revealed a strong interest by all in the co-facilitators facilitating a systemic change effort in their school system.

The district is small, partly urban and partly rural, consisting of one administrative building, one high school, one middle school, four elementary schools, and one early childhood center, within an area of 32 square miles. Currently, the school district has a total population of 5,447 students, 260 teachers, and 283 professional staff. It has a student-to-teacher ratio of 19:1, a minority student population of 13.4 percent, and approximately 40 percent of its student population is eligible for free lunch.

To date, Phase I (Assess Readiness & Negotiate an Agreement) of the GSTE has been used with the Decatur school district, and documented in a research report (see Joseph & Reigeluth, in final preparation). In this study, the co-facilitators applied the guidance provided by the three events of Phase II to

the school district's change process. In general, the co-facilitators used a three step process for implementing the three events of the GSTE within the school district:

1. Present the district with the GSTE's advice for conducting each event (i.e., meet with district personnel to plan each event, and provide the district personnel with hard copies of the event for their review).

2. Guide the district in redesigning the entire event or parts of the event to suit the needs of their district, as called for by the GSTE.

3. Support the district personnel in the process of implementing the redesigned event.

The focus of this research was on finding ways of improving each of the three events as performed in this case and suggesting possible improvements for the GSTE. As each event was implemented, it was important to collect and analyze formative data. This process is discussed next.

Collect and analyze formative data on the instance.

Throughout the performance of events 5, 6, and 7 of the GSTE, the researcher conducted formative evaluation (Bloom, Hastings, & Madaus, 1971; Cronbach, 1963; Thiagarajan, Semmel, & Semmel, 1974) of the Decatur change process, with the expectation that the data would help improve the GSTE. When collecting formative data, Reigeluth and Frick (1999) recommend conducting interviews and observations, and reviewing documents. The data were collected and analyzed from multiple sources that include: the researcher as participant

observer, field notes of all visits, focus-group interviews, individual interviews with the stakeholders of the school district, and surveys. Additionally, important documents about the district were collected and analyzed (i.e. mission statements, goals, and demographic data). The purpose of the data analysis was to identify strengths, weaknesses, and possible improvements in phase II of the GSTE as implemented in this case.

Researcher's Role

The researcher was the primary data collection instrument. As a co-facilitator and participant, the researcher's role was to use the design theory (GSTE) to provide the school district with the guidance necessary to redesign and implement each event in this study. As a researcher and observer, the researcher's role was to help the district identify the strengths and weaknesses of the design theory that were specific to their change process. The researcher capitalized on the various roles (facilitator, participant, researcher, and observer) to analyze the data, and hypothesize recommendations for improving of the GSTE.

Core Team Meetings

Once the Core Team had been formed in Event 5, the researcher conducted biweekly Core Team meetings with school and community participants in the change process throughout the duration of this study. The Core Team worked with other stakeholders to carry out the major work of the systemic change effort, as called for by the GSTE. The team consisted of 5 key

opinion leaders (Superintendent, Principal, Board Member, PTA Leader, and Teachers' Association President, plus two co-facilitators). Most of the data in this study were collected through focus group interviews with the Core Team, because most of the activities in Phase II were performed by the Core Team. This team was instrumental in helping the researcher to identify the strengths, weaknesses, and possible improvements to the design theory for this specific case.

University-based support team

A university-based support team had been established to help the researcher analyze the data, and to give advice to the co-facilitators throughout the change effort. The support team met with the co-facilitators after each visit to the school district to review field notes and other records of all the meetings in the school community. The team then helped the researcher analyze the data to ensure the interpretations were valid and to decide upon the best advice to give the school district about their change process. The support team had eight members, including one university faculty and seven advanced graduate students who specialize in different aspects of school change.

Revise the instance.

The researcher and the Core Team made constant revisions to the district's change process throughout the entire study. Revisions to the instance (application of the event in this case) were made before and after the implementation of each event. It is important to note that revisions made before the implementation of each event were not based on formative data; rather they

were the result of redesign efforts by the Core Team. Revisions made after the

implementation of each event were based on formative data. All revisions were

based on the data collected from the sources described above in step 3 of the

study design. The researcher, as often as possible, tried out the revisions. All

decisions about any revisions were made by the Core Team (which included the

co-facilitator/researcher).

Repeat the data collection and revision cycle.

As much as possible the researcher repeated the process of data

collection, analysis and revision that is described above for each event. In this

way the researcher found that some events or activities worked well in certain

situations or conditions but did not work well in others. According to Reigeluth

and Frick (1999), these "situationalities are important discoveries in a research

effort to improve a design theory and better meet the needs of the practitioners"

(p. 644).

Offer tentative revisions for the theory.

Throughout the study the findings were constantly used to hypothesize

revisions for the GSTE. At the conclusion of this dissertation, the researcher

offers a tentative revised version of the three events of the GSTE (see Appendix

A). Of course additional case studies field testing these three events of the GSTE

should be conducted in similar and not so similar contexts in order to replicate

and validate the findings (Reigeluth & Frick, 1999). In those studies where the

context is very different from the Decatur school district, the researcher would

expect to find "situationalities" (Reigeluth, 1999) in the guidelines, indicating that

some guidelines that worked well in one community may not work well in another. In those cases where the context is very similar to that of the Decatur school district, the researcher would still expect to find some situationalities. Situationalities will be important for facilitators working in different kinds of public school districts throughout our nation.

Methodological Issues

Qualitative research has been criticized for not being rigorous and lacking validity and reliability. Reigeluth and Frick (1999) address three methodological issues for formative research: "(a) construct validity, (b) sound data collection and analysis procedures, and (c) attention to generalizability to the theory" (p. 647).

Construct Validity

Construct validity is defined as "establishing correct operational measures for the concepts being studied" (Yin, 1984). In this formative research study the concepts of interest were: 1) the methods offered by the GSTE, 2) the situation that influenced the use of the GSTE, and 3) the indicators of strengths and weaknesses of the GSTE (Reigeluth & Frick, 1999).

According to Reigeluth and Frick (1999), "there are two ways in which construct validity can be weakened: omission (not faithfully including an element of the theory [GSTE]) and commission (including an element that is not called for by the theory [GSTE])" (p. 647). In this research study, every effort was made through dialogue with the Core Team, and the university-based support team to

address the issues of omission and commission of elements (methods, events, activities) in the design theory (GSTE). In the instances (context and situation) where the Core Team came to consensus on omitting/committing an element in the GSTE, the instance was documented along with a rationale.

Yin (1984) recommends three methods that increase construct validity.

1) Use multiple sources of evidence. Many researchers refer to this as *triangulation* during data collection. As mentioned earlier, in this study the data were collected and analyzed from multiple sources that included: researcher as participant observer, field notes of all visits, focus-group interviews, individual interviews with the stakeholders of the school district, and surveys.

2) Establish a *chain of evidence* during data collection. Miles and Huberman (1984) recommend using contact summary sheets in addition to fieldnotes after every visit with the school district. They recommend including the following information on the contact sheets: people, events or situations that were involved; the main themes or issues in the contact; the research questions that the contact most closely addressed; new hypotheses, speculations or guesses about the field situations; where the fieldworker should place most energy during the next contact; and what sorts of information should be sought. In this study a table was developed which included much of the contact information that Miles and Huberman (1984) recommend be gathered after each visit to the school district (see Appendix B). Additionally, after each site visit the researcher met with the university-based support team to plan and discuss much of the contact information needed for the next site visit.

3) Have the draft case study report reviewed by key informants. This is a form of *member checking*. As each event in this study was implemented in the school district, the researcher shared drafts of the report with the Core Team describing "what happened" (and how what happened differed from the guidance offered by the GSTE) as the event was conducted, and "what did and did not work well," and included "tentative recommendations for improving" the GSTE. Also, throughout the study, following each site visit the researcher shared the field notes with the Core Team to allow for member checking.

Sound Data Collection and Analysis Procedures

The methods used to increase construct validity (Yin, 1984) can also be used to increase "the credibility or accuracy of the data" (Reigeluth & Frick, 1999, p. 647). There are various ways of increasing credibility in a formative research study, and in this study every effort was made to address each of these methods: triangulation, chain of evidence, member checks, researcher's role, assumptions, biases, and theoretical orientation (Reigeluth & Frick, 1999, p. 648).

In addition to "credibility or accuracy of the data," Reigeluth and Frick (1999) suggest that "the soundness of the data collection and analysis procedures" is also influenced by the "thoroughness or the completeness of the data" (p. 647). Reigeluth and Frick (1999) outline various ways of ensuring and enhancing thoroughness of the data: advance preparation of participants, an emergent data-collection process, gradually decreasing obtrusivity, iteration until saturation, and identification of strengths as well as weaknesses.

Advance preparation of participants – the researcher had been working and developing a relationship with the Core Team for over two years, and had formed a good working relationship to the point that they were able to share their reflections openly and comfortably.

An emergent data-collection process – is recommended in formative research studies since the researcher has "little idea as to what weaknesses and areas of improvement" may be found in the theory. This study was designed to be flexible and cater to the needs of the school district. The research questions were open-ended, and became more targeted throughout the duration of the study.

Gradually decreasing obtrusivity – as the study evolves the researcher can become less obtrusive while collecting any missed data or while confirming earlier findings. As the Core Team began to develop the capacity to facilitate their meetings, the researcher gradually transitioned from the role of facilitator to that of an observer and advisor.

Iteration until saturation – the notion of iteration (a recursive data collection and analysis process) was embedded within the design of this study. Saturation was reached when subsequent iterations of data collection confirmed or repeated prior findings.

Identification of strengths as well as weaknesses – this notion forms the basis for conducting this study, and drove all data collection and analysis procedures.

Attention to Generalizability to the Theory

According to Reigeluth and Frick (1999), "rigor in formative research is increased by enhancing ways that the results can be generalized to the theory" (p. 649). They suggest two issues to pay attention to for generalizing results to the theory: situationality and replication.

Situationality - The researcher probed to identify possible "situationalities" that may have restricted the generalizability of the results found in this case to other cases. Situationalities are the ways that events, activities, and methods may vary for different contextual situations. In this study the researcher provided enough *rich, thick description* "so that readers will be able to determine how closely their situations match the research situation, and hence whether the findings can be transferred" (Merriam, 1998, p. 211). Additionally, the researcher has hypothesized situationalities and incorporated them into the theory. Reigeluth and Frick (1999) state that "when situationalities are incorporated into the theory, the theory becomes more useful for a broader range of situations" (p. 649).

Replication – Before actual changes to the theory can be made, additional developmental research studies will be needed to support or qualify the findings. Also, additional research studies should be conducted in various contexts (i.e., small, medium and large rural, urban and suburban school districts) in order to identify additional situationalities that can be incorporated into the theory and to develop guidelines for each.

Conclusion

I have described the formative research methodology that was used in this case study to improve three events of the GSTE in the context of a public school district. In the next chapters, for each event, I will describe first "what happened" (and how what happened differed from the guidance offered by the GSTE) as the event was conducted; second I will describe "what did and did not work well;" and third I will present "tentative recommendations for improving" the GSTE. All the findings and recommendations that follow will be based on data that emerged from the case and most importantly negotiated by the Core Team (which includes the researcher).

CHAPTER 4: RESULTS

In this chapter I offer the results of this study. The reader is reminded that the purpose of this study is to test and improve the process guidelines that are described in Events 5, 6, and 7 of the GSTE. This chapter is therefore organized into three major sections. The first section presents the results on **Event 5: Select the Initial Core Team**. The second section presents the results on **Event 6: Create the Core Team Dynamic**, and the third section presents the results on **Event 7: Capacitate the Core Team in Systems Design**. Each section provides the reader with a description of what happened as the event was conducted, and an evaluation of what worked well and did not work well. Additionally, each section includes tentative recommendations for improving the event within the context of this study, as well as a discussion of the findings for that event.

Event 5: Select the Initial Core Team

This section provides first, a summary of **what happened** as Event 5 was conducted, and identifies ways in which "what happened" differed from the guidance offered by the GSTE and why. This includes identifying operational details that were not spelled out in the GSTE. Second, evidence is shared about **what did and did not work well** while conducting Event 5. The researcher then offers a summary of tentative recommendations for **improving Event 5 in this case**. Lastly the researcher **discusses the findings** and makes his recommendations for improving the GSTE. Most of the data in this study were

collected through focus group interviews with various stakeholders in the school district. The stakeholders were instrumental in helping the researcher to identify the strengths, weaknesses, and possible improvements to the GSTE for this specific case. According to Jenlink et al. (unpublished manuscript),

> The primary intent of this event is to decide who will be on the Initial Core Team. The purpose of this team is to create a climate and culture in which designing for systemic change can flourish. The Initial Core Team will not make design decisions; rather it will be integrally involved in the creation of the Design Team (which will do the actual designing) and the Decisioning Team (which will make the decisions/recommendations about the design) and so will have great impact on the whole change effort. It is important for you to recognize that the Initial Core Team is a place where the culture of design is created as a seed which then grows when the team is expanded to include a broader range of stakeholder participants. (p. 1)

The primary goals of this Event are:

- To choose appropriate team members for the Initial Core Team.

- To establish a positive public perception of the change process.

In the following section the researcher offers his observations as he co-facilitated the process of selecting stakeholders to serve on the Core Team.

What Happened?

On three separate occasions prior to selecting the Core Team members (January 23, 2001, February 05, 2001, and February 15, 2001), the facilitators made visits to the school district to explore the possibility of building a relationship, and to assess the district's readiness for change. These visits, although not an explicit part of this Event, also provided the facilitators with insight into who might be appropriate Core Team members. During our first visit to the school district, the superintendent identified four stakeholder groups that we should meet with initially (Field notes, January 23, 2001 p. 3):

1. Teachers' Union

2. School Board

3. Administrative Team

4. Parents

On February 5 and 15, 2001, the facilitators met separately with 3-5 members from each of the following stakeholder groups: 1) central administrative staff, 2) parents, 3) building principals, 4) teacher association officers, and 5) school board and superintendent. The purposes of the meetings were for the facilitators to explain their interests, motives, and views of change, and to assess the school district's interest in and readiness for change and for help from neutral outside facilitators.

Jenlink et al. (unpublished manuscript) recommend the following process activities for selecting members to serve on the Core Team:

1. Prepare yourself (facilitator)

2. Redefine the process and criteria

3. Work on public relations

4. Create a sketch of the team

5. Create an initial slate for the team

6. Personally check out the initial slate

7. Develop a recruiting plan for each slate member

8. Recruit the initial Core Team members

9. Reformulate the slate, if necessary

10. Publicize the change effort and the formation of the team (p. 3-5)

The facilitators prepared themselves (activity 1), by reading and reviewing the guidance offered within this Event of the GSTE. The facilitators then presented this process (activities 2 through 10) to the superintendent with the mutual understanding that the process was not a plan of action that needed to be followed step by step, but rather it was intended to be used as a guide to initiate the (re)design of the district's process for selecting key leaders in the school community to serve on the Core Team.

The facilitators and the superintendent *customized* their selection process using the guidance offered within activities 1 through 10 above as a general guide. Additionally, using the "Criteria" and types of "Power Groups" outlined within Event 5 of the GSTE, the facilitators were able to give the superintendent advice on the different types of people that should be included on the Core Team (e.g., superintendent, a board member, and a parent leader) (Jenlink et al.,

unpublished manuscript). The two main criteria outlined in Event 5 of the GSTE

for selecting Core Team Members are:

A. Core team members should be either formal or tacit leaders in the community or district. *Gaining participation from leaders in this initial core team may be difficult because they are typically very busy, but the investment will pay off if they are able to make the commitment because they will lend a high degree of credibility to your efforts.* (p. 8)

B. Core team members should be change advocates. They should exemplify change in their own lives as well as in what they say. They should be models of learning—by outward action the community should know that they are open to change because they are constantly re-creating themselves. *This is important because we recognize that change begins first within each individual, and the team must be able to recognize that in their own lives. In addition, if they are going to suggest changes to others, they must be models of change themselves so that they are beyond reproach during difficult decision making about the changes.* (p. 8)

Additionally, the GSTE outlines "Power Groups" to consider when selecting

members for the Core Team (e.g., superintendent, board member, teacher of the

year, parent, business owner and resistant factions).

The selection process was facilitated over a number of meetings and

telephone conversations between the facilitators and the superintendent. The

facilitators shared their thoughts with the superintendent, and helped him to

understand the role and purpose of the Core Team, the criteria for selecting Core

Team members, and the types of people who might best serve on the Core

Team.

The facilitators felt it was important for the **superintendent** to serve on the

Core Team, especially since he was new to the position (less than one year), and

claimed to have a very different leadership style (collaborative) from the previous

superintendent (top-down). Therefore, the facilitators urged the superintendent

to serve on the Core Team. He accepted and was the first member selected to

serve on the Core Team.

It was important to keep the selection process as neutral as possible. If

the superintendent was to make all the selection decisions, the process would

not have been neutral or collaborative. The facilitators played an important role in

keeping the process neutral, by helping to ensure that each stakeholder group

understood the role and purpose of the Core Team. Due to the small size of the

district, in some cases it was obvious who the key opinion leaders were in each

of the stakeholder groups, and these were the people that needed to be invited to

serve on the Core Team.

The second member selected to serve on the Core Team was **a building

principal**. This particular principal, had worked in the district longer than any

other principal, and was well respected by the school community. She had

worked with many of the previous superintendents, and was knowledgeable of

the school district's history. Both the superintendent and the facilitators felt that

this principal would make an ideal Core Team member. The superintendent invited the principal to serve on the Core Team. She accepted the invitation.

The third member selected to serve on the Core Team was **a parent** (PTA/O president of one of the elementary schools in the district). The facilitators recommended this parent based on their interactions with her during the parent stakeholder group meeting on February 5, 2001. The facilitators felt that the parent met all the criteria for selection, and the superintendent agreed. The facilitators made a personal phone call to invite the parent to serve on the Core Team. She accepted the invitation.

The fourth member selected to serve on the Core Team was **a teacher** (teachers' association president of the school district). She was the obvious choice in this case because she was an elected leader of teachers in a small school district. Also, based on our interactions with her during the teacher stakeholder group meeting on February 5, 2001, we felt she met all the criteria for selection. The facilitators made a personal phone call to invite the teachers' association president to serve on the Core Team. She accepted the invitation.

The fifth member selected to serve on the Core Team was a **board member**. The superintendent contacted the board of education members, and asked them to choose a person to serve on the Core Team. The facilitators recommended that the board member to be selected should be able to influence the thinking of other board members, and be open-minded. The initial person selected that most fit these criteria could not make the time commitment to serve

on the Core Team. The board of education then selected another member to serve on the Core Team who also met all the criteria.

Consequently, the Core Team consisted of the five influential leaders described above (superintendent, building principal, PTA/O president, teachers' association president, and board member) and the two university facilitators (faculty and doctoral student).

What did and did not work well?

Based on the observations of the facilitators, overall this Event worked well in that it helped the facilitators and the school district to select the members of the Core Team, and those members turned out to be well suited to the needs and function of the Core Team. However, the purpose of this research was to identify potential weaknesses or omissions in the GSTE regarding the selection of the Core Team. As mentioned earlier, one of the goals outlined in this event is to "establish a positive public perception of the change process." In this case the facilitators and the superintendent, while redesigning their process for selecting the Core Team members, unintentionally omitted the following two process activities that deal with public relations and publicizing the change effort (Jenlink et al., unpublished manuscript):

3. Work on public relations.

Inform the **public** about the formation of the Initial Core Team, and invite them to become involved in the effort by contacting you. An article in the local newspaper is one possible way to do this. *The policy of stakeholder*

inclusion and participation should be established very early in the change

process. It will help to set a nonthreatening tone and will reduce future

resistance to the effort. (p. 3)

10. Publicize the change effort and the formation of the team.

Finally, you should share information regarding the change effort and the

team membership list with the public. Alternatives here include press

releases, school newsletter announcements, school letters home to all

parents, church bulletin announcements, or a celebrative reception for the

members, to which the public is invited. This event would be an

opportunity to share the good news that change has begun in the

community, to inform the community as to who is on the initial core team,

to provide an opportunity for everyone to meet the members, and to

emphasize the importance of their (the community members') involvement

in the change effort. Making these early connections with the community

allows the team to begin to build the sorts of relationships that will become

important as change progresses. Also this is an opportunity to celebrate,

which is very important in building a strong culture among participants. (p.

6)

Process activities 3 and 10 were the only activities that were omitted

unintentionally during the selection of the Core Team members in this case.

On November 27, 2001, eight months after the formation of the Core

Team, during a routine Core Team meeting, the facilitators asked the members

what they thought did and did not work well with the Core Team selection

process. One Core Team member commented on the make-up of the team by stating, "I think we left out a very important group, and that was the support staff. That's a huge group of people in our district" (Building Principal, Field notes, November 27, 2001, p. 1). All the members of the Core Team agreed with the principal's comment on including a member of the support staff. Other comments regarding the make-up of the Core Team addressed the issue of inviting students to serve on the Core Team. One team member commented on this issue by stating, "It would be hard to interact the way we do if a student were included on the Core Team" (Superintendent, Field notes, November 27, 2001, p. 1). Another Core Team member stated that, "students should be included maybe on the Design Team, but I don't think [they should be included] on the Core Team. Confidentiality [would be a concern] with students [on the Core Team]; we couldn't have open conversations. We would be very guarded I think." (Parent, Field notes, November 27, 2001, p. 2). One team member commented, "I'm sure you could find a student who would be willing to keep things confidential, but would we be willing to speak about our colleagues?… I wouldn't feel comfortable" (Building Principal, Field notes, November 27, 2001, p. 2). Another team member commented that,

> Somewhere along the way, it wouldn't hurt, though, to come up with a way for student input. Much like you're doing with the board right now … is to sit down with some students and to interview them and talk with them. (Superintendent, Field notes, November 27, 2001, p. 2)

One member made a final comment regarding the make-up of the Core Team, and criteria for selection, "I think your initial Core Team has got to be one that values change, and has a view of what the township is, versus one that you're gonna have to convince to change." (Board Member, Field notes, November 27, 2001, p. 2)

The group discussion ended with a final comment pertaining to the role the facilitators played in the Core Team selection process. The superintendent commented on this issue by stating, "You as facilitators were extremely valuable and helpful in educating me as to the type of people that should be on the Core Team" (Superintendent, Field notes, November 27, 2001, p. 2).

On May 20, 2002 during a Core Team retreat (the second of two retreats), the facilitators again asked the members what they thought could have been improved with the Core Team selection process. This time their responses focused on criteria for membership on the Core Team. The building principal commented on the type of person to consider including on the Core Team and stated:

> You have to include people who have contrary opinions. If you don't, then your group really has no validity with the larger community. Because if everybody on the group looks like us and talks like us and acts like us, then what have we done? Well we have just reproduced ourselves. We haven't really grown. (Field notes, May 20, 2002, p. 2)

The superintendent noted:

Well it's important as we move forward to have the total community

represented, and if we don't, we will be making a major mistake. And

when we come down to decision making time, then you are always going

to have that opposition out there that should have been part of this

process. (Field notes, May 20, 2002, p. 2)

One of the facilitators stated, "I think very often people who are in the opposition

are particularly active and vocal because they feel left out of the process" (Field

notes, May 20, 2002, p. 2). The board member shared his thoughts with the team

by stating, "I don't mind the opposition, as long as the opposition doesn't attack

our people" (Field notes, May 20, 2002, p. 2). The board member had strong

views about the type of person that should serve on the Core Team. He stated:

I think you are looking for somebody who is not against change, who

wants to help kids, who wants to help the Township; they don't have their

own agenda. This team would have been totally different if it included a

contrarian. You want to include open-minded, and outspoken people on

the Core Team. (Field notes, May 20, 2002, p. 2)

The principal added another perspective to the discussion. She said that:

My way of thinking of what's more critical when you form a group like this

is not so much who you put on the team, although you have to consider

that. But because you can't have all the information you need to make that

perfect, then I think what becomes more critical is what you do with that

team to cause them to become a team, a real team, not just five people or

seven people that work together. I think that becomes more critical even

than who you pick. (Field notes, May 20, 2002, p. 2)

The parent commented on the Core Team selection process and noted:

Well, I like the way you did it with us… you brought all the PTA and PTO

presidents in together. We didn't really know what we were there for, but

to get our opinions on what needed to be changed. And I liked that as

opposed to coming into a one-on-one or one on seven. That was a whole

lot more comfortable. I think you speak freer when there are more of you

around the table than there are of the interviewers. (Field notes, May 20,

2002, p. 2)

Recommendations for Improving Event 5 in this Case

The description above of what happened, and what did and did not work

well, is based on the researcher's observations and the Core Team interview

data. As such the following recommendations for improving Event 5, within the

context of this case, are offered here. The recommendations are presented in

two sections: 1. Recommendations to keep what worked well in this case, and 2.

Recommendations to improve what did not work well in this case.

Recommendations to keep what worked well in this case

- The researcher thinks that this case could have been improved if process

   activities 3 and 10 were implemented. These process activities were

   designed to address one of the goals for this event, which is to "establish

   a positive public perception of the change process." The public seemed to

be curious and in the dark about the change process and their opinions about the change process were neither positive nor negative due to their lack of knowledge about it.

- The Facilitators should use the initial visits to the school district as an opportunity to help make Core Team member selection decisions. In this case the facilitators used their previous meetings with each of stakeholder groups to help offer the superintendent advice about which members from each group would make a good fit on the Core Team. Both the researcher's observations and the Core Team parent's response support the idea of the facilitators using the initial school visits as an opportunity to meet with various stakeholder groups to begin to help make Core Team member selection decisions.

- The superintendent and the facilitator(s) should work closely together in selecting members of the Core Team. In this case the superintendent noted how valuable and helpful the facilitators were in helping him to understand the type of people that should be asked to serve on a Core Team, and the superintendent's knowledge about various leaders contributed greatly to the quality of the selections. It was important that the Core Team selection process be a publicly defensible process influenced by politics.

- Whenever possible, have each of the stakeholder groups select their own representative to serve on the Core Team, using the criteria specified by the GSTE. In this case, a mixed method was used to select the Core

Team members. As described above in the "What Happened" section, the facilitators invited the superintendent to serve on the Core Team. In this case, the building principal, and the teachers' association president were obvious choices. The principal had been working in the district longer than any other principal, and knew its history. The teachers' association president was an elected leader of teachers in a small school district, and therefore a key opinion leader and an obvious choice. The parent was recommended by the facilitators based on their interactions with her during the initial school visits. The superintendent asked the school board to select a member to serve on the Core Team that met most of the criteria for selection.

- Whenever possible, in order to build neutrality, have the facilitator(s) make personal phone calls to invite the prospective Core Team members or when feasible to initiate a stakeholder group's selection of their own representative. In this case the facilitators invited the superintendent, the parent and the teacher association president to serve on the Core Team. The principal and board member were invited by the superintendent.

Recommendations to improve what did not work well in this case.

- The Core Team should have included a member of the support staff to serve on the Team. There were 260 support staff and 200 teachers in the school district. The Support staff is a powerful group, and therefore should have been invited to serve on the Core Team. In this case all the Core

Team members agreed that they should have invited a member of the
support staff to serve on the team.

- The Core Team should develop ways of getting student input throughout
  the process without requiring that they serve on the Core Team. In this
  case, it was clear that the Core Team members felt that including a
  student on the Core Team would not allow for rich and open dialogue, and
  they would not be able to share certain sensitive information with a
  student present.

- The facilitators and the superintendent should have taken the time to
  discuss and come to consensus on the issue of including an individual
  holding a minority viewpoint on the Core Team. In this case, the Core
  Team members held different opinions on this issue. The principal felt that
  the team should have included members with contrary opinions,
  oppositional views, and minority viewpoints. The superintendent inferred
  that it would be important to include this type of person later during the
  decision-making process. The board member clearly did not think
  including an oppositional member on the Core Team would be a good
  idea.

Discussion of the Findings for Event 5

These results provide significant evidence that overall the process outlined
in the GSTE for selecting Core Team members worked well. In particular, it was
found that the process activities, the criteria, and the types of power groups

outlined in Event 5 provided the superintendent and the facilitators with the guidance necessary for selecting stakeholders to serve on the Core Team. However, it is also important to discuss here a key omission on the part of the facilitators and the superintendent, as well as issues concerning the make-up and criteria for the selection of Core Team members.

In this case the facilitators and the superintendent, while redesigning their process for selecting the Core Team members, unintentionally omitted the process activities designed to publicize the establishment of a Core Team, and the change effort. This omission brings up the question of whether or not, in a Core Team selection process, it is important to inform the public. In this case, the public was not informed about the formation of the Core Team until well after the team had been formed and normed. As the researcher observed and reflected over the process, it seemed more appropriate to think of activities that have to do with publicity as "continuous" activities that need to be addressed throughout the change process. According to Jenlink et al. (unpublished manuscript), each continuous activity is initiated within a discrete event. Perhaps this Event would have been an effective point in the process to initiate a continuous activity for publicizing the change effort. Currently the GSTE has a continuous activity entitled "Communicate with Stakeholders," which emphasizes two-way open communication and the use of a common language of systemic change among all stakeholders. In this case, the participants did not widely publicize the formation of the Core Team and the change effort. Since the authors of the GSTE have included two process activities (out of ten) to deal with the issue of

publicity within this event, perhaps they should consider creating a new continuous event devoted to publicizing the change effort. This researcher recommends keeping process activities 3 and 10 in this event, and also to include them as initiation of a new continuous activity that deals with publicizing the change process.

Another issue for discussion here is the make-up of the Core Team, and in particular whether it is important to include a member of the support staff and a student on the Core Team. In many school districts the support staff is a very powerful stakeholder group, as is the case in the district studied here. In this case, the facilitators and the Core Team overlooked or simply did not think to include a member of the support staff on the Core Team. However they did suggest that a member of the support staff should have been invited to serve on the Core Team. The researcher was a former high school mathematics teacher for five years, and understands that a support staff member (e.g., instructional assistant, bus driver, cafeteria worker), serves an important role in the culture and structure of the school and more importantly in the life of the student. In chapter 2 of this dissertation, the researcher cited literature saying that having broad stakeholder ownership and participation was a vital element of any systemic change process. It was shown that omitting this element from the change process can lead to resistance and lack of support from those stakeholders that were left out of the process. Based on the researcher's experience, observations and literature analysis, and on the data from the Core Team interviews, he recommends the inclusion of a member of the support staff

on the Core Team, and for those involved in the selection process to have a discussion on the topic of including a support staff member.

In this case students were not invited to serve on the Core Team. The findings indicate that the leaders in this school district felt that students could not be trusted to preserve confidential issues that emerged on the Core Team. Hence, these leaders felt that if a student was invited to serve on the Core Team, they would not have been as comfortable disclosing their honest opinions about sensitive issues. Two issues regarding student participation in an educational change process deserve some discussion. First is the issue of student exclusion from the process of learning about and creating a culture where systemic change will be embraced. Second is the issue of how to include students' perspectives on educational change.

Jonathan Kozol (1991) noted in his introduction to *Savage Inequalities* that "the voices of children … have been missing from the whole discussion" of educational change and the change process (p. 5). Fullan and Stiegelbauer (1991) have written specifically about the role of students as key stakeholders in the change process, and in the following passage they state:

> When adults do think of students, they think of them as the potential
> beneficiaries of change. They think of achievement results, skills,
> attitudes, and jobs. *They rarely think of students as participants in a*
> *process of change and organizational life.* While research of the 1980s
> has begun to look at students as active participants in their own education,
> and it has become clearer what should be done, too little has actually

happened to enhance the role of students as members of the school as an

organization... *What would happen if we treated the student as someone*

whose opinion mattered in the introduction and implementation of reform

in schools? (p. 170)

Research indicates that this is not a new phenomenon. In a recent issue of

Educational Researcher, Cook-Sather (2002) highlighted a rarely discussed

issue in education: trusting students. She writes:

Historical images of and attitudes toward young people have helped to

ensure students' exclusion from policymaking and practice-shaping

conversations. Although it is rarely articulated as such, the most basic

premise upon which different approaches to educational policy and

practice rest is trust—whether or not adults trust young people to be good

(or not), to have and use relevant knowledge (or not), and to be

responsible (or not). The educational institutions and practices that have

prevailed in the United States both historically and currently reflect a basic

lack of trust in students and have evolved to keep students under control

and in their place as the largely passive recipients of what others

determine is education. (p. 4)

As passive recipients, students have been silenced, and excluded from the

change process. It was quoted earlier that "the purpose of this [Core] team is to

create a climate and culture in which designing for systemic change can flourish

(Jenlink et al., unpublished manuscript, p. 1).

Perhaps it would be beneficial during the formation of the Core Team (or soon after), to have a conversation with the Core Team where the following questions are addressed: 1) how can the adult leaders move towards including students' perspectives, building trust, and engaging in dialogue about the process of educational change? 2) How can the adult leaders in the school district community help students to become actively engaged in a change process? 3) What role(s) will students serve in the change process, and what types of activities will they be asked to engage in? 4) At what point should students be invited to join the change process? There are no clear answers to these questions; they are offered as food for thought, and for possible inclusion as part of this event.

Cook-Sather (2002) explains that:

To move toward more fully authorizing the perspectives of students is not simply to include them in existing conversations within existing power structures. Authorizing student perspectives means ensuring that there are legitimate and valued spaces within which students can speak, re-tuning our ears so that we can hear what they say, and redirecting our actions in response to what we hear. (p. 4)

There are some school districts where levels of trust and communication are strong enough where there would not be such negative effects of including students on the Core Team. Furthermore, Cook-Sather (2002) outlines two challenges that will need to be addressed when including student perspectives.

The twin challenges of authorizing [or including] student perspectives are

(a) changing the structures in our minds that have rendered us disinclined

to elicit and attend to students' voices and (b) changing the structures in

educational relationships and institutions that have supported and been

supported by this disinclination. (p.4)

The researcher recommends that Event 5 of the GSTE should provide guidance

to begin to address the challenges of including students' perspectives. The four

questions offered above can serve as a starting point for a discussion.

A final topic for discussion is the concern of including a contrarian—a

person who tends to hold strong oppositional views, or minority viewpoints on the

Core Team, and who is also a well respected leader. In this case a contrarian

was not included on the Core Team, and the Core Team members had very

different opinions on whether a contrarian should have been invited to serve on

the Core Team. The Core Team members offered several rationales (Pro and

Con) for whether a contrarian should be included on the Core Team. They

include:

- Pro: The Core Team will be perceived by the community as being well
  balanced.

- Pro: It will model and encourage broad stakeholder ownership and
  involvement. The community will feel that they are well represented.

- Pro: Most contrarians are vocal because they feel left out of the process.
  Inviting them to join in the change process, may give them an outlet to share
  their concerns and reduce their opposition.

- Con: It will be more difficult to help evolve a contrarian's mental model and mindset.

- Con: It will slow down the process.

- Con: It will make it more difficult to build trust.

Based on the evidence from this case, the researcher recommends that the Core Team wait until later in the process (perhaps on the Decisioning Team), when the Core Team expands into a much larger group of stakeholders, to include a contrarian. The Core Team will develop a knowledge base in the change process, systems thinking and developing a learning organization in Event 7. Having this knowledge base will provide the Core Team members with strategies for working with stakeholders with oppositional view points. Additionally, the researcher strongly recommends that the GSTE directs those involved in the selection process to have deep discussions on the topic of *including a contrarian on the Core Team*.

  Criteria for judging what worked well in this case

The major criteria for judging whether or not each event and the activities of the event worked well rest upon whether the goals of the event were met. In this event the successful formation of the initial Core Team was the key criterion for judging whether or not the event was successfully implemented. This included the extent to which the Core Team had key opinion leaders in all the major stakeholder groups. An additional criterion included the extent to which stakeholders were aware of the Core Team and were interested in its role and function within the district. The amount of time it took to implement the event was

also an important criterion. Another criterion was how well the event met the needs of the school district, and that the selection process was a publicly and politically defensible process.

Summary

Overall this researcher found the process outlined in Event 5 of the GSTE for selecting Core Team members worked very well as it was implemented in this case. Taken in total, the major ways that this case could likely have been improved include process activities that deal with a) publicizing the change effort as a starting point for a continuous activity; b) including a member of the support staff on the Core Team and taking time to discuss the topic; and c) discussing the topics of student and contrarian membership on the Core Team. The following is a summary of the researcher's major recommendations for improving the GSTE:

- Add a new continuous event that deals with publicizing the change process. This new continuous event should be initiated during the Core Team selection process.

- The GSTE should include an activity to help guide a discussion about whether or not to include: a support staff member, a student, and a person holding a minority viewpoint .

- The GSTE should provide guidance to begin to address the challenges of including students' perspectives, as well as how and when to include students' perspectives.

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Having deep discussions about who should be selected, what type of people should be selected, and for what purpose can help those involved in the Core Team selection process to develop a (critical) systems view of the process.

Event 6: Create the Core Team Dynamic

This section provides first, a summary of **what happened** as Event 6 was conducted, and identifies ways in which "what happened" differed from the guidance offered by the GSTE and why. This includes identifying operational details that were not spelled out in the GSTE. Second, evidence is shared about **what did and did not work well** while conducting Event 6. The researcher then offers a summary of tentative recommendations for **improving Event 6 in this case**. Lastly the researcher **discusses the findings** and makes his recommendations for improving the GSTE. According to Jenlink et al. (unpublished manuscript),

> The primary intent of this event is to begin developing interpersonal and team relationships in the Core Team. It is important that the Core Team members begin to create and nurture trust essential to working relationships, and which leads to the creation of a supportive culture essential to the change process… This event entails the Core Team members engaging in a Retreat designed to capacitate the team and build the team members knowledge with respect to systemic change… You will foster an understanding of the Core Team's role and relationship to the systemic change process. Included in this action is a two-day overnight retreat that is facilitated off-site at prearranged facilities… A focus of the retreat, in addition to creating team dynamics, is begin orientation of the team to systems thinking and practice. (p. 1)

The primary goals of this Event are:

- To establish the Initial Core Team identity within the school district and community.

- To design a capacitating process for the Initial Core Team.

- To establish a culture of design for change within the school district and the community.

- To develop the skill and knowledge base of the team.

In the following section the researcher offers his observations as he co-facilitated the process of designing and conducting the Core Team retreat.

What Happened?

Once the Core Team members were selected, it was important to begin to develop and norm the team. Using the guidance provided by the GSTE in Event 6, the facilitators began the process of capacitating the Core Team. Jenlink et al., (unpublished manuscript) recommend the following activities for building the capacity of the Core Team:

      6.1 Build Motivation for the Core Team

      6.2 Design the Retreat

      6.3 Conduct the Retreat

      6.4 Reflect on the Retreat

Prior to designing and conducting the retreat, the GSTE (Jenlink et al., unpublished manuscript) calls for taking the Core Team through the process of building its motivation (activity 6.1):

This involves examining the team's current understanding of motivation. It also involves the team self-assessing to determine existing levels of motivation, and comparing those levels to what is needed for the Core Team to build and sustain motivation for the change effort. (p. 1)

Since the Core Team members were enthusiastic about the retreat, the facilitators elected not to formally examine the Core Team's motivation. Activity 6.1 was intentionally omitted from the process in this case, because the facilitators felt that its goal had already been accomplished. One of the facilitators provided the following rationale for omitting activity 6.1 from the case:

We did not explicitly examine our understanding of motivation, nor did we explicitly self-assess. But I was sensitive to the issue of motivation and felt that the Core Team's enthusiasm for the retreat was at high levels, perhaps mainly due to the time we put into the Agreement. So I did not feel we needed to explicitly or formally conduct those activities. In other words, it was an intended omission, based on the situation. (Tape recording, May 12, 2003)

The members of the Core Team met for the first time on March 7, 2001, and they decided to delay the retreat until the summer months. The Core Team members were very busy with end-of-school-year activities, and engaged in multiple tasks related to the administration of the schools. Therefore, they felt they could focus better, and have a more enjoyable retreat experience during the summer months when school was in recess. The GSTE advises that the retreat be conducted soon after the formation of the Core Team, and prior to moving on

with the change process. Since it was not possible to conduct the retreat right away, the facilitators and the Core Team decided to continue to meet and work on advancing the change process.

During the nine meetings preceding the June 2nd-3rd retreat, in addition to designing and planning the retreat experience (activity 6.2), the facilitators worked with the Core Team to help them to develop ground rules for team meetings (see Field notes March 07, 2001), to understand their role as a Core Team, to discuss the change process and the values of the process, to plan an agreement for the change process, and to meet with the school board to discuss the agreement.

The GSTE provided design ideas to help the facilitators and the Core Team work through the design logistics for the retreat. Some of the design activities that the GSTE recommended include the following: determining the best dates and times to conduct the retreat, examining the purpose of the retreat, choosing a facilitator to conduct the retreat, choosing a location for the retreat, and designing the activities and agenda for the retreat. On April 9, 2001, the Core Team met to plan the date, time and location for the retreat. The Core Team decided to hold a two-day retreat beginning at 10am on Saturday, June 2, 2001 and ending at 3pm on Sunday, June 3, 2001. On May 7 and May 14, 2001, the Core Team meetings were devoted to planning for the retreat. During these meetings the facilitators helped the Core Team members identify the purposes and values for the Retreat (see Field notes, May 7, 2001). The Core Team developed the following purposes for the retreat:

- Building consensus

- Resolving conflicts

- Understanding collaboration

- Handling and learning how to give constructive criticism.

They also outlined values for their retreat:

- Confidentiality

- Total Honesty

- Empathy (Respect for the feelings of others)

- Disclosure

- Trust

- Accepting of faults

- "We," not "I"

Since the Core Team facilitators were not experts in conducting retreats, they sought the advice of an outside master facilitator of retreats and the lead author of the GSTE. The Core Team provided him with the list of purposes and values outlined above. Additionally, the Core Team facilitators provided him with a list of what they expressed as possible purposes for the retreat (e.g., group process, understanding the overall process, reflection, and values of the change process). The facilitators expressed that it would be important for the Core Team members to understand the overall change process that they were going to use, and therefore decided to add an activity to the retreat agenda to help the Core Team gain this understanding. Taking the purposes outlined by the Core Team

and the facilitators, the outside facilitator developed a retreat agenda. Each of the activities on the agenda was aligned to the purposes of the retreat.

The outside facilitator had agreed early on that he would facilitate the Core Team's retreat and develop the retreat activities, but due to a family emergency, he had to cancel. Thus, it was up to the Core Team facilitators to facilitate the retreat. A few days prior to the retreat, the facilitators had a two-hour phone conversation with the outside facilitator to review in detail each of the activities outlined on the retreat agenda (see Table 11). It is important to note that the agenda was not part of the GSTE, and that it was created for this case.

Table 11: Core Team Retreat Agenda

Day 1

10:00 – 10:30	Introductions and orientation for the retreat:
	Ice-breaker activity, review of agenda
10:30 – 10:45	The Core Team: Who are we?
	Roles and responsibilities of each of us, strengths and weaknesses of the team
10:45 – 11:00	Ground rules
	Establish ground rules for meetings and other interactions and behaviors
11:00 – 11:45	Trust-building
	Rope activity and debrief
11:45 – 12:30	Collaboration
	Dialogue on what, why, who, how, problems, benefits, dialogue
12:30 – 1:30	Lunch together
1:30 – 2:30	Understanding the overall change process
	Dialogue on the article on the GSTE
2:30 – 3:00	Collective reflection
	Big Question Activity
3:00 – 3:30	Break and reflection time
3:30 – 4:30	Constructive criticism
	Role play activity and debrief/discussion
4:30 – 5:30	Managing conflict
	Dialogue on negative and positive conflict
6:00 – 7:30	Dinner together
7:30 – 9:30	Passionate conversation
	Watch *MindWalk* video

Day 2

8:00 – 9:00	Breakfast together
9:00 – 9:30	Reflections on Day 1
9:30 – 10:00	Making connections
	Dialogue on the *MindWalk* video
10:00 – 10:30	Break
10:30 – 11:30	Building consensus
	Dialogue on what, how, why, who, when
11:30 – 12:00	Values of the change process
	Review the GSTE's values and revise for our change effort
12:00 – 1:00	Lunch together
1:00 – 2:30	Values of the change process
	Continue to review the GSTE's values and revise for our change effort
2:30 – 3:00	Reflection on the retreat and next steps
	Reflect individually on major take-aways, share with group, discuss next steps

The retreat took place on June 2-3, 2001 (activity 6.3). The agenda provides an accurate description of how the retreat was conducted. The retreat was a time for the Core Team to begin to focus on group dynamics, collaboration, giving and receiving constructive criticism, managing conflict, understanding the overall change process, consensus, and responsibilities of the team members. The retreat began at 10am on June 2 with the facilitators asking the Core Team members if they felt comfortable enough to allow the retreat experience to be tape recorded. Even though the facilitators explained that the tapes would be kept in a safe place, they unanimously felt that tape recording the retreat would constrain their conversations, and were fearful of the tapes getting into the "wrong hands."

The facilitators proceeded with an ice-breaker activity designed to help build trust. Each Core Team member was asked to share a personal story that they felt no one else knew about them. The facilitators then provided the Core Team with a copy of the retreat agenda, and proceeded with a review of the agenda. At 10:30am the Core Team began to discuss what they perceived their roles and responsibilities to be individually and collectively as Core Team members. They also discussed each of their strengths and weaknesses. At 10:45am they created ground rules for the retreat. At 11:00am the facilitators engaged the Core Team in another trust-building activity, which was a rope activity. The final morning activity was a discussion on the meaning of

collaboration, where each Core Team member shared their experiences and definitions of collaboration.

After lunch, the facilitators provided the Core Team with copies of the Jenlink et al. (1996) article, entitled *An Expedition for Change,* so that they would begin to gain an understanding of the change process that the facilitators were using with them. The facilitators emphasized the importance of using the GSTE as a guide for planning the Core Team's journey, and that they could make changes to this guide at any time. Even though the design theory (GSTE) is catered to the facilitator, we explained to the Core Team that we felt it was important for them to begin to learn to be facilitators of their process.

At 2:30pm the facilitators asked the Core Team to think of a "big question" that they wanted answered concerning the overall change process. Their big question was, "Will the school board continue to support the change effort?" (Field notes, June 2-3). This activity was followed by a break and time for reflection. The facilitators spent the last two hours before dinner (3:30 - 5:30pm) engaging the Core Team in a role playing activity on constructive criticism, and a dialogue on managing positive and negative conflict. After dinner, the facilitators showed a video entitled *MindWalk,* which introduced the Core Team to important concepts, including systems thinking, small group dynamics, conflict, perceptions, and assumptions.

On June 3rd, the second day of the retreat, following breakfast, the facilitators asked the Core Team members to take some time to reflect on their experience from the previous day. The group reflection naturally transitioned into

a dialogue about the *MindWalk* video. At 10:30, following a break, the facilitators

engaged the Core Team in a conversation on building consensus. For one hour

before and one hour after lunch, the Core Team reviewed the values of the

GSTE's change process. The facilitators asked the Core Team if there were any

values they thought should be added or omitted. The Core Team members

expressed that they were in accord with the values presented to them.

The final activity of the retreat was taking the time to reflect on the retreat

experience. The facilitators generally followed the sub-activities outlined within

activity 6.4. They understood the importance of having the Core Team debrief the

retreat experience. For the final half-hour of the retreat, the facilitators and the

Core Team reflected on the retreat and possible next steps. Also, the Core Team

met on two separate occasions following the retreat to reflect on the retreat (June

4, 2001, and May 20, 2002). On all three occasions, everyone involved

expressed that the goals of this event and the purposes that the Core Team and

facilitators developed for the retreat were met during this retreat. The retreat

helped the Core Team to develop a team identity, and they were beginning to

develop a knowledge base about the change process. They were also beginning

to establish a culture of design by playing an instrumental role in designing their

own retreat. In total, the retreat helped to develop the capacity of the Core Team

to engage in a systemic change process.

The Core Team made a commitment to educate the school board and the

community in every step of their change process. According to the facilitators, the

Core Team left the retreat with a sense of cohesiveness and excitement. Their

enthusiasm and motivation for forming the Core Team, for designing and conducting the retreat, and for engaging in the change effort remained consistently high. They understood what their role was as a Core Team, and felt ready to engage in a systemic change effort.

What did and did not work well?

Based on the observations of the facilitators, overall this Event worked well in that it helped the facilitators and the Core Team to develop a team identity, and a knowledge base about the change process. Additionally, this Event helped to develop a design culture on the Core Team, by encouraging the members to design their own retreat.

As described earlier, the facilitators decided not to spend time building the motivation of the Core Team (activity 6.1), since the Core Team members were enthusiastic about the formation of the team and the process of designing and conducting the retreat. This was an intended omission that worked out well for this case. On June 4th, 2001, the day after the retreat, and on May 20, 2002 (during the 2nd Core Team Retreat), the facilitators and the Core Team took some time to debrief the June 2nd-3rd, 2001 retreat. On both occasions, the facilitators asked the members what they thought did and did not work well with the retreat.

One Core Team member commented on the need to focus on trust-building by stating, "We needed to spend more time on the trust. I think if you do nothing else in the first retreat, you build trust, and then everything else will be a

piece of cake" (Board Member, Field notes, May 20, 2002, p. 3). Another Core

Team member also commented on the trust-building issue by stating:

> The reality is you can't build real trust in a day-and-a-half retreat. You can
>
> do some things to cause people to think along the lines of "is this person
>
> trustworthy or not." And you can kind of get people to bare their soles a
>
> little bit, which helps that along. But real trust is going to happen over the
>
> course of time. (Building Principal, Field notes, May 20, 2002, p. 3)

Another Core Team member commented on the trust issue, stating, "I think it is

important that you know the people. That's a big trust builder. You have to know

them before you can trust them. And I think that's what we were doing at the

retreat" (Parent, Field notes, May 20, 2002, p. 4). The facilitator, who was also a

Core Team member, summarized for the group the specific retreat activities that

the members felt helped to build trust:

> So basically… what I heard you saying was the icebreaker activity in the
>
> beginning where we got to know each other [and] tell about our lives, was
>
> a really good start to building trust. And the rope activity. Do you think we
>
> need more trust-building activities? (Facilitator, Field notes, May 20, 2002,
>
> p. 4)

One member responded to the facilitator's question by stating, "Yes I don't think

it would hurt to add something on trust-building or team building on the second

day" (Building Principal, Field notes, May 20, 2002, p. 4). The Core Team

members expressed that the ice-breaker and rope activities worked well in

helping to build trust. However, they also expressed a need for more trust-building activities.

Recently the two Core Team facilitators met to review and reflect on the retreat experience. What follows is an excerpt from the May 12, 2003 transcript of their conversation dealing specifically with the issue of trust.

Facilitator 1: We did specifically deal with trust. We had an activity that dealt with trust, the rope activity. I think that spending that time together, getting to know each other better, also helped considerably to build trust. So I do support the statement you just read, in the sense that I think the retreat did have a very positive influence on the levels of trust amongst the Core Team members. I think it did a lot of other good things as well, but I would certainly agree that trust is probably the most important for effective teamwork. And it was addressed I think quite well at the retreat.

Facilitator 2: I know that you are aware that building and maintaining trust is also a continuous event. Do you think that this was an appropriate time to initiate that continuous event?

Facilitator 1: Well theoretically the team didn't exist until then, and so that would typically be the first opportunity to really attempt to build trust. I suppose it would have been possible, given the postponement of the retreat, for us to have addressed trust earlier. So the continuous event could possibly start earlier if the retreat was postponed. But if it is not postponed, then I think that is the first time you can address trust.

…

Facilitator 1: In light of subsequent problems we have had on the Leadership Team and scheduling a retreat for them, I do have some doubts on whether it would have been possible to schedule a retreat in March, when the Core Team was first formed. I think if we had tried to schedule a two-day retreat in March, we may have encountered the same problems. So to some extent the delay of the retreat may be a wise thing to do in a standard process. And if that is true, then maybe we should rethink the trust issue, and think about how that might be initiated earlier. Although without a retreat it is really hard to imagine engaging in a trust-building activity like the rope activity. The other parts of the retreat that helped most to build trust, I'm sure really could have been done in a non retreat setting.

Facilitator 2 (reads specific trust-building activities from the retreat agenda): In terms of trying to improve this Event, what I'm hearing the Core Team and facilitators saying is that trust is one area where the retreat could have been improved. But their reflections did not get specific in terms of how to improve in the area of trust. I don't know if we asked that question, in terms of what we can do to improve either the activities or the types of activities to build trust.

Facilitator 1: Did you get the feeling from their comments that the trust-building part of the retreat did not really work very well?

Facilitator 2: No, just the opposite of that, I got the feeling from their responses that the activities worked well, but they wanted more trust-

building activities. In terms of improving the case or the GSTE, what they are saying is that they would like to see more trust-building activities. Given that we didn't probe for what should be done: more of the same type of trust-building activities or should there be different trust-building activities, and are you familiar with them?

Facilitator 1: I don't think you can build trust in one day. I think there is only so much that you can expect to accomplish in a retreat. I'm not sure it would have been productive to spend much more time on trust-building in the retreat for that reason. To some extent I think trust is built over time as you can observe that people are honoring you, and you grow to trust them as you see that they honor you. So, I guess I would be cautious about any comments to the effect that there should be more trust-building during the retreat. To me the biggest problem with trust that the Core Team members had was trusting the school board. I think it was because of their mistrust of the school board that they were suspicious of each other—that if word got out to the school board of what they said, then that may come back to hurt them. So I think to some extent it was the broader atmosphere of lack of trust within the school district, and particularly with the board, that most of the problems with mistrust that we encountered sprang from.

Facilitator 1: I think there are other important things that are done during the retreat, so that whatever additional increment in trust that another trust-building activity might have had, might not outweigh the cost of

giving up one of the other activities: learning the importance of

consensus and learning what consensus is, and the nature of

collaboration, and all the other kinds of things we did there. I just have a

gut feeling that those were important, too. And I would be concerned

about dropping them in order to do more on trust-building that may not

have much of an effect, given the need for trust to be built up gradually

over time as opposed to doing it all in one day.

One Core Team member felt that the retreat experience could have been improved by including strategies for helping the Core Team to guide their learning and understanding of the change process and the other concepts introduced during the retreat. She offered the following strategy to possibly include during the retreat:

You know what might be interesting to do is to give everybody a journal

and have them journal for 60 seconds before every break. And then use

those reflections at the end to talk about, do you have a different thought

or what do you want to share. I think that one thing that causes people to

change is seeing that they are changing. Understanding that yes I'm going

from point A to point C. And journaling is a good way to do that And if you

can make it quick and dirty, 60 seconds and hold them to 60 seconds, you

can get a lot down in 60 seconds once you figure out how to do that.

(Building Principal, Field notes, May 20, 2002, p. 4)

Another Core Team member commented that, "I think it would also be interesting before you even start your retreat, to ask them to write down why they think they are here" (Board Member, Field notes, May 20, 2002, p. 4). "That could be their first journal entry" (Building Principal, Field notes, May 20, 2002, p. 4). Finally, another Core Team member stated that, "It would be interesting to see what their point of view is at the start and read those at the end" (Board Member, Field notes, May 20, 2002, p. 4).

A facilitator commented, "It may be best for the retreat facilitator to not be the Core Team facilitator. This would allow the facilitators to play the role of Core Team members" (Facilitator, Field notes, June 4, 2001, p.1). As mentioned above, the plan was to hire an outside facilitator, but he had to decline about a week before the retreat. Nevertheless, the outside facilitator was instrumental in helping to design the retreat agenda (based on the purposes that the Core Team members outlined for the retreat) and in preparing the Core Team facilitators to conduct the retreat. The facilitators felt they did a great job in facilitating the retreat, but they believed the retreat experience would have been better for everyone if the outside facilitator had been able to take on the role of retreat facilitator. The following is an excerpt from the May 12, 2003, transcript of their conversation dealing specifically with the issue of an outside facilitator for the retreat.

> Facilitator 1: In our case, given the lack of detail in the GSTE, the lack of sample agenda, and the lack of detailed information about how to engage in each of those various activities, I think for us it would have

been very difficult to do that event without guidance from an experienced facilitator. So in our particular case, having the outside facilitator to guide us was very important. Having him do it would have been even better, or at least would have made me feel more comfortable. Now, as it turns out I guess in reflecting on it, it is possible that our conducting that retreat may have been positive. It may have brought us closer to the other Core Team members, and may have given them more respect for us as facilitators, since it did go well. … So as it turned out, for this particular case, I think having the extra guidance and us doing it ourselves was probably a good thing. I'm trying to think of what possible downsides there might be, and one of them is that we weren't able to participate as members of the Core Team so much because of the role of the facilitators. …. But at the same time I think it did enhance their estimation of our abilities as facilitators. You know in a way that kind of felt like our initiation rights or coming of age.

Facilitator 2: Would you say that having two facilitators in this case helped that situation in that we were able to switch off roles?

Facilitator 1: That's a good point, I think that if it had just been me alone as facilitator it would have been considerably more difficult. I would have felt considerably less secure doing it. Having someone else there who can be kind of a back up, some who can be evaluating what you are doing and evaluating the audience's reactions, and intervening to address an issue that may have escaped the facilitator in the hot seat, is

probably an important factor. So in terms of making recommendations, trying to generalize to other applications of this event, when you do have co-facilitators, I would feel more comfortable with them being the facilitators of the retreat as long as there is pretty detailed guidance in the GSTE, which there should be after this experience. If it were just an individual facilitator, it might be helpful to bring in an outside facilitator for the retreat, to be co-facilitator or to just be a member of the Core Team. That is speculative, because we don't have much evidence to base that on.

It was disappointing to the facilitators that they were not able to tape record the retreat experience. The recordings would have provided more rich historical data than what is available in the fieldnotes, and this would have been helpful for planning future retreats in this change effort. However, the facilitators learned that, because the Core Team did not want to be recorded, they needed to work on building trust with each other. Before any change work could begin in the district the issue of trust needed to be addressed.

An interesting highlight of the retreat was the movie *MindWalk.* Since the retreat, the video has been the subject of both jokes and appreciation by the Core Team, due to the nature of the subject matter of the video. It was a slow movie, no action, no violence, no comedy, no romance, just a long conversational journey on systems thinking and changing mindsets. *MindWalk* was instrumental in helping the Core Team members understand systems

thinking, and more importantly it laid the foundation for evolving their mindsets or worldviews about education and society. However one Core Team member stated:

> I didn't understand the video as well as I thought I should. I think we need to do a little bit more pre-work before they watch the video. I might even suggest that you have them watch the video earlier on, and then have them record some thoughts about what they think it means. Then have them watch the video again at the end of the retreat and see what is different about what they think they know or didn't know before. I still feel like I need to watch that video again. (Building Principal, Field notes, May 20, 2002)

The Core Team members said they enjoyed the retreat experience and were eager to attend future retreats. The following statement by a Core Team member captured the sentiment of the team:

> I'd like to have more retreats, because it was easier for everybody, and we had a lot more time to get a lot done. Maybe [we should] have one retreat every two or three months. Maybe not do an all-nighter, but one where we can spend the whole day. (Board Member, Fieldnotes, November 27, 2001, p. 1)

Recommendations for Improving Event 6 in this Case

The description above of what happened, and what did and did not work well, is based on the researcher's observations and the Core Team interview

data. As such the following recommendations for improving Event 6, within the context of this case, are offered here. The recommendations are presented in two sections: 1. Recommendations to keep what worked well in this case, and 2. Recommendations to improve what did not work well in this case.

Recommendations to keep what worked well in this case

- In this case activity 6.1 (build motivation for the Core Team) was intentionally omitted from the process, because the Core Team members were excited about, and looking forward to, the retreat. The facilitators most likely made the right decision when they elected to skip activity 6.1. Otherwise, they could have wasted the Core Team's time, and jeopardized their motivation for the process.
- Delaying the Core Team retreat was likely a good thing for this case. The Core Team members were very busy during the school year, and felt that postponing the retreat until the summer would allow them to focus on the process with minimal distraction from their school responsibilities. During this delay time the facilitators and the Core Team were able to continue to work on other important aspects of the change process (e.g., develop ground rules for Core Team meetings and develop an understanding about the change process). Continuing to work on important aspects of the change process most likely helped to sustain the Core Team's motivation.
- This case could have been improved if Event 6 had included a sample retreat agenda. Since the Event did not provide a sample agenda, the

outside facilitator and the Core Team had to develop one, based on the purposes that they outlined for the retreat. The agenda developed for this case worked well, as the activities helped the Core Team members to begin to develop a team dynamic by getting to know one another better, developing trust, and understanding the change process.

Recommendations to improve what did not work well in this case.

- The co-facilitators believe that the retreat experience could have been improved for them and for the rest of the Core Team if an experienced outside facilitator had been able to facilitate the retreat. Based solely on the outside facilitator's description of each of the retreat activities outlined on the agenda, the Core Team facilitators had to conduct the retreat. One positive note is that the facilitators were able to gain respect from the Core Team members by facilitating the retreat. The facilitators were able to demonstrate their group process facilitation skills.

- Even with the 4-month delay, the Core Team members felt that more 'trust-building' and 'get to know you' activities were needed during the retreat. In weighing all the evidence in this case, the researcher is not convinced that more trust-building activities were needed in this case. One of the goals of the retreat was to initiate trust-building, and the researcher believes that goal was accomplished. Adding more trust-building activities would have required removing one or more of the other activities outlined on the retreat agenda, which are equally as important as trust.

- The Core Team members expressed that journaling their reflections would help them make meaning of the various concepts they needed to understand during the retreat experience. The retreat activities did include time for reflections; however the Core Team members were not encouraged to write their thoughts down on paper.

Discussion of the Findings for Event 6

These results provide significant evidence that, overall, the process outlined in the GSTE for developing the capacity of the Core Team worked well. However, it was also found that the facilitators needed the guidance provided by an outside facilitator for details about how to conduct each of the retreat activities. Taken together, both the guidance from the GSTE and the guidance from the outside facilitator provided the facilitators and the Core Team with the guidance necessary for developing the capacity of the Core Team. However, it is important to discuss here the findings regarding weaknesses and improvements in the event, including the omission of Activity 6.1, issues concerning what to do if the retreat needs to be delayed, hiring an outside facilitator, incorporating more trust-building activities, and the retreat agenda.

In this case the facilitators elected not to include Activity 6.1 (build motivation for the retreat). The facilitators felt that the Core Team already had a high level of motivation for the retreat from the outset, and did not feel the need to build their motivation further at that point. They therefore proceeded with the next activity in the Event. As a result the researcher could only gather data

(opinions) about whether or not this case would have been better off if Activity 6.1 had been performed. The results indicate that there was no lack of motivation on the part of any of the Core Team members at the commencement of the retreat, and therefore that skipping this activity was unlikely to have hurt the process in any way. However, the facilitators did convey that they felt the way they used the time leading up to the retreat (i.e., to develop the agreement and design the retreat) may have contributed to the Core Team's high motivation level and thereby served as a substitute for the activity.

Another issue for discussion here is dealing with delay time leading up to the retreat. The GSTE advises:

In the case where the timeline must be extended, or the Team cannot meet for several weeks/months after the initial forming, then you (the Facilitator) will need to determine, in concert with the Core Team, what the purpose of the Retreat is in relation to when it is conducted.

In this case the facilitators and the Core Team expected a long delay, and were able to use the delay time not only to plan for the purposes of the retreat, but also to develop ground rules for working together as a team, to develop an agreement for the change process, and to meet with the school board to review and endorse that agreement. The facilitators and the Core Team used the delay time productively, and did not let it hinder their motivation and progress. Delays that occur during a change process can cause people to feel discouraged, because they tend to think the process will take much more of their time. Postponing the retreat until the summer was likely a good thing in this case,

because the Core Team members were busy with various school-related responsibilities.

This researcher recommends that Event 6 of the GSTE include guidance to help the facilitators and the Core Team to plan for any delay time that may emerge requiring the retreat to be postponed. If the retreat is delayed for a month or less, then this time should perhaps be used solely for designing the retreat experience. Currently, Event 6 of the GSTE recommends 7 - 10 days for designing the retreat experience. If the delay time will be more than one month, then it will most likely be important for the facilitator and the Core Team not only to design the retreat, but also to continue with the change process (e.g., to develop ground rules for working together as a team, to develop an agreement for the change process, to meet with the school board to review and endorse that agreement, and to develop their knowledge base in systems thinking) to sustain the motivation of the Core Team members.

Another issue for discussion here is the hiring of an outside facilitator for the retreat. The GSTE recommends that the Core Team hire an outside facilitator. In this case the Core Team facilitators planned to have an outside facilitator for the retreat; however the facilitator had a family emergency and needed to cancel. The Core Team and the process facilitators decided they would go ahead with the retreat, and the process facilitators would serve as the retreat facilitators. In this case there were two facilitators, and they needed guidance from an outside facilitator to provide them with an understanding for how to conduct each of the activities outlined on the retreat agenda. The

facilitators expressed that by facilitating the retreat, they seemed to grow closer to the Core Team, and they were able to gain a level of respect as the Core Team's facilitators. Even so, the Core Team facilitators felt the experience could have been improved if the outside facilitator had been able to facilitate the retreat. This evidence supports the GSTE's advice to hire an outside facilitator; however, more research is needed in which there is an outside facilitator for the retreat, in order to identify what does and does not work well in that part of Event 6. If there are two facilitators available who are also members of the Core Team, and there is detailed guidance from the GSTE, then perhaps an outside retreat facilitator is not needed. However, if only one facilitator is on the Core Team, then the researcher recommends that the Core Team hire an outside facilitator to help conduct the retreat, even if there is detailed guidance from the GSTE. If the facilitator has experience conducting this type of retreat, then perhaps an outside facilitator is not needed. However, in order for this facilitator to develop a relationship as a member of the Core Team, the researcher recommends that the facilitator and Core Team hire an outside facilitator to conduct the retreat. This researcher also recommends that the Core Team plan on having a backup facilitator ready in case the main facilitator has to cancel.

The findings emphasize the need to incorporate more trust-building activities as an option for the retreat experience. The emphasis one should place on trust-building depends on the context and situation. School districts that have an established culture of trust most likely will not have to spend as much time during the retreat on trust-building. Thus far, trust seems to have been a

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reoccurring issue in this case. Trust was also a major concern in Event 5 during

the formation of the Core Team. In particular, the Core Team members felt that

they could not trust students to keep confidentiality. We also see the trust issue

emerging here (in Event 6) during the design and implementation of the retreat

experience. The Core Team members felt that they needed to build more trust on

the team, and were not comfortable being audio/video taped.

The Core Team members also expressed the need to incorporate the use

of journals to aid the learning process throughout the retreat experience. The

Core Team recognized that building trust was not something that could happen

from a single retreat, but rather that building trust needed to be initiated perhaps

during the retreat and developed and nurtured throughout the change process.

The practice of reflection, journaling and disclosure can perhaps help Core Team

members to begin to build a culture of trust on the team. It should also be noted

that the GSTE has a continuous activity entitled "Build and Maintain Trust." The

researcher recommends that Event 6 of the GSTE include examples of reflection

activities (e.g., journaling experiences throughout the retreat, sharing personal

thoughts from the journals, and collective reflections on readings about building

trust) and readings about trust to help the Core Team to begin to understand and

initiate strong trusting relationships throughout the change process. In particular,

he recommends the following articles about trust:

In the article, *Trust in Schools: A Core Resource for School Reform*, Bryk

and Schneider (2003) found in their longitudinal study of 400 Chicago elementary

schools, that trust was a key ingredient for educational change, and that trust

was grounded in respect, personal regard, competence in core role responsibilities, and personal integrity among all stakeholders. In the article, *If It Doesn't Embrace Chaos, Can It Be Called a Strategic Plan?,* Shipengrover (1996) discusses trust as a "strange attractor" (one of the key concepts of chaos theory). She describes how an organizational pattern began to emerge and repeat following the chaotic beginnings of that organization's transformation process. She further identifies that the following patterns shaped a culture of trust throughout the organization: sharing power by decentralization, empowering informal leaders, providing structures and support to help everyone hone their skills, collaborative relationships among key stakeholders, encouraging risk taking and experimentation by protecting the freedom to fail, and trusting people to find their own level of involvement.

Finally there is the issue of the retreat agenda that was designed in this case. Based on all the data collected in this case, it is safe to say that the agenda worked well for this situation. However, the GSTE warns that

> Individuals may find it easier to adopt the suggested Retreat format rather than engaging in re-design. Opting for the example we have provided removes the Core Team from designing their own Retreat and reduces the opportunity for ownership of the capacitating process. This also endangers the success of a retreat when it doesn't consider the unique character of the Facilitator and Core Team as well as the context in which they will function. (p. 10)

The facilitators and the Core Team designed the purposes of the retreat. Based on these purposes, the outside retreat facilitator worked with the Core Team to design the retreat agenda. The researcher recommends that the agenda created in this case be incorporated within Event 6 of the GSTE as an example. Providing examples can be very helpful during the design and redesign process. The key to designing the retreat agenda is in the purposes that are created by the Core Team. The agenda items or activities should be well aligned with the purposes developed by the Core Team. It is expected that, in other applications of this Event in other school districts, the purposes of the retreat will vary, and therefore the agenda will need to be aligned to those purposes.

Criteria for judging what worked well in this case

The major criteria for judging whether or not each event and the activities of the event worked well rest upon whether the goals of the event were met. In this event the successful design and implementation of a Core Team retreat was the key criterion for judging whether or not the event worked well. Also, the amount of time it took to design and implement the retreat was an important criterion. Perhaps the most important criterion was the extent to which a culture of trust was developing on the Core Team. Another important criterion was how well the retreat met the needs of the Core Team members.

Summary

Overall the researcher found that the process outlined in Event 6 of the GSTE for building the capacity within the Core Team worked well in this case.

Some of the design activities engaged in by the Core Team included: outlining the purposes and values for the retreat, choosing a facilitator, agreeing on date(s), time(s) and location for the retreat, and helping to design the activities on the agenda. The product of this design process was the actual retreat agenda. Most importantly, the Core Team began to develop a design culture by going through this design process. In Chapter 2 of this dissertation, the researcher cited literature supporting the need to have an understanding and a knowledge base in systems design, and that systems design was a vital element of the systemic change process. This Event worked well in initiating the development of the Core Team's competence in systems design. However, the major ways that this case could likely have been improved include: hiring an outside facilitator to facilitate the retreat, incorporating more trust-building activities in the retreat, and incorporating the use of journals to document reflections and the learning process throughout the retreat. The following is a summary of the researcher's major recommendations for improving the GSTE:

- If there are two facilitators available that are also members of the Core Team, and there is detailed guidance from the GSTE, then perhaps an outside retreat facilitator is not needed. However, if only one facilitator is on the Core Team, and there is detailed guidance from the GSTE, the researcher recommends that the Core Team hire an outside facilitator to help conduct the retreat.

- The Core Team should plan on having a backup facilitator ready in case the main facilitator has to cancel.

- Include examples of reflection activities (e.g., journaling experiences throughout the retreat, sharing personal thoughts from the journals, and collective reflections on readings about building trust).

- Consider adding two articles on trust-building to Event 6 of the GSTE that the Core Team can read and react to: 1. *Trust in Schools: A Core Resource for School Reform*, by Bryk and Schneider (2003), and 2. *If it Doesn't Embrace Chaos, Can It Be Called a Strategic Plan?* by Shipengrover (1996).

- Include guidance to help the facilitators and the Core Team to plan for any delay time that may emerge requiring the retreat to be postponed.

- Add the retreat agenda from this case to the GSTE as an example.

Event 7: Capacitate the Core Team in Systems Design

This section provides first, a summary of **what happened** as Event 7 was conducted, and identifies ways in which "what happened" differed from the guidance offered by the GSTE and why. This includes identifying operational details that were not spelled out in the GSTE. Second, evidence is shared about **what did and did not work well** while conducting Event 7. The researcher then offers a summary of tentative recommendations for **improving Event 7 in this case**. Lastly the researcher **discusses the findings** and makes his recommendations for improving the GSTE.

According to Jenlink et al. (unpublished manuscript),

The primary intent of this event is to begin to build the knowledge base and capacity of the Core Team to engage in systemic change by facilitating their learning about the basics of systems theory, change process and educational systems design. (p. 1)

The primary goals of this Event are:

- To explore purposes, beliefs and values about the change process.

- To develop Core Team members' knowledge base and capacity in educational systems design.

- To continue to evolve the group dynamics developed during the Core Team retreat.

- To build upon the change culture established during the Core Team retreat.

What Happened?

Until this point of the process, the Core Team members did not feel comfortable having the researchers tape record their conversations. Therefore, much of the data presented in the previous two Events were from the facilitator's field notes of the Core Team meetings. However, by the end of the retreat (Event 6) the Core Team had developed a greater level of trust, and they felt comfortable having the researcher tape record the meetings. As a result, the researcher has incorporated Core Team dialogues throughout the presentation of results of this event. Once the Core Team members began to develop a culture of design by going through the process of designing, conducting and reflecting on their retreat, it was time to begin to build their knowledge base in systems thinking.

Jenlink et al., (unpublished manuscript) recommend the following process activities for achieving the goals of this Event:

> 7.1 Explore Purposes, Beliefs, and Values about the Change Process

> 7.2 Explore Educational Systems Design and Systems Theory

> 7.3 Apply Educational Systems Design and Systems Theory

In general the facilitators did use the process skeleton within Event 7 of first *exploring* a concept and then *applying* it. However, they elected not to follow the activities outlined in Event 7 of the GSTE. Instead, they redesigned the Event to include a series of readings and conversations focused more specifically on developing the Core Team's knowledge base and understanding of Peter Senge's five disciplines of organizational learning (see Table 12). The facilitators

and the Core Team members decided that instead of learning about systems

theory and educational systems design first (as outlined in the GSTE), it would

be more beneficial in this case to begin to learn about how to create a learning

organization. For the facilitators, it seemed too early in the process to start

reviewing systems theory and educational systems design in depth with the Core

Team. The concepts were too theoretical to start out with, without providing the

Core Team with some foundational knowledge about the principles and the

process of organizational learning.

A description of the process that was designed in this case for Event 7 is

provided in Table 12. Seven Core Team meetings were devoted to reviewing and

discussing Peter Senge's five disciplines of a learning organization. What follows

is a chronological description of what happened at each of the seven Core Team

meetings.

Table 12: Summary of the Process Designed in this Case

7/2/01	**Core Team Reading Plan was Developed**
	Books purchased by Superintendent: *Fifth Discipline* and *Schools that Learn*, by Peter Senge et al.
	Article distributed by Superintendent: Peter Senge Interview
8/6/01	**Group Reflection**
	Members were worried about the collective bargaining process
	Members wanted to use the collective bargaining process as a learning opportunity
	Discussion: Team Learning, Dialogue, and Working with an Agenda
	Discussion: Core Team Members Began to Apply System Thinking to their Own Lives
	Discussion: Personal Mastery
	(Instructional Strategies: Guiding questions w/page numbers and instructional metaphors)
8/28/01	**Discussion: Shared Vision and Team Learning**
	Spent more time on the notion of Dialogue
9/4/01	**Discussion: Mental Models and Systems Thinking**
	Ladder of inference to explain mental models
	Connected these two concepts with the *iceberg*
	Core Team members identified a critical event that occurred in the school district, and applied that event to the *Iceberg*.
	(Instructional Strategies: Visuals—ladder of Inference and the iceberg)
9/12/01	**Discussion: Reviewed 'the Beer Game' from Senge's *Fifth Discipline***
	(Instructional Strategies: Read through a simulation)
9/25/01	**Facilitator Give a Power Point Presentation on Systemic Change**
	Group Reflection
10/9/01	**Reinforcing and Balancing Processes**
	Core Team Created a Causal-Loop Diagram
	ICEBERG

Meeting 1: July 2, 2001

The purpose of the July 2nd 2001 meeting was to develop a reading plan with the Core Team to build their understanding of systems thinking. The Core Team decided that instead of planning the readings for the whole summer, they would allocate half of the time during each of the upcoming meetings to go over the readings assigned from the previous meeting, and decide which readings they would be most interested in pursuing for the following meeting. They decided that they would spend the other half of the meeting time working on moving the change process along (e.g., Event 5: publicizing the change effort and Event 8: planning community meetings).

At the request of the facilitators, the superintendent purchased the books *The Fifth Discipline* and *Schools that Learn* by Peter Senge for all the members of the Core Team. Some of the Core Team members felt that the reading from *The Fifth Discipline*, was pretty dense, and that the readings from *Schools that Learn* might be more appropriate to start with as a team. The Core Team decided that, for the next meeting on August 6th 2001, they would focus on gaining a better understanding of the five disciplines that Senge outlines in Chapter 2 of *Schools that Learn*: Personal Mastery, Mental Models, Shared Vision, Team Learning, and Systems Thinking. With guidance from the facilitators, the Core Team developed a reading plan for *Schools that Learn* (see Table 13).

Table 13: Reading Plan for Schools that Learn

Ch 2 pp. 59 - 92: A Primer on the Five Disciplines

Ch 7: Systems Thinking

Ch 12: Leadership, pp. 432 - 438: A School Board that Learns

The superintendent also distributed an article for the Core Team to read, which was an interview with Peter Senge:, "*Why Change Is so Challenging for Schools*" by Dennis Sparks (2001). In this interview Senge talks about his book, *Schools that Learn*, and discusses the five disciplines.

Meeting 2: August 6, 2001

Since it was a little over one month since the previous Core Team meeting, the facilitators thought it would be a good idea to have the Core Team members reflect on their process thus far, prior to beginning the dialogue on the assigned readings.

> **Facilitator 1:** The more I reflect on what this team has been doing and how far we have come as a team over the past six months, the more excited I get about the potential here. I think this team has really jelled very well. I think that there is a real openness, and the level of trust is really progressing very well. I am just really hopeful of what is going to happen in the next couple of months to next year. I feel renewed and enthusiastic on coming back from the retreat.

> **Superintendent:** I am very excited about the direction and work of this team.

> **Board Member:** Since our last meeting we have had the 4-H fair. I had a chance to talk to a lot of people. It's been a very busy month.

During the few weeks leading up to this meeting, the teachers' association and the school district leaders had been engaged in a collective bargaining process. In Indiana the school leaders and the representatives of the employees are required to collectively bargain and negotiate on salary, wages, hours, and related fringe benefits. The teachers' association was requesting higher teacher salaries, and the district leaders were claiming that there were not enough funds in the budget to support an increase in teacher salaries. These tensions between teachers and administration began to emerge in the Core Team meetings. In the following comment the teachers' association president shares that she is worried about the collective bargaining process and the impact that it may have on her attending the future Core Team meetings.

> **Teachers' association pres.:** I am probably more worried than others, because of this position. I don't know if you [superintendent] have told them [the facilitators] about the [collective] bargaining. We are at impasse, so that causes problems. … We have mediation on the 13th, and so let's say if we didn't settle it on the 13th, until we would get a contract, the teachers would not have to work after 3 or 4. So then I know that I could not come to these [Core Team] meetings.

The principal also commented on her concern with the collective bargaining process. Interestingly, she tied the concept of systems that she had been reading with the district's collective bargaining. The superintendent also saw this emerging issue as a learning opportunity.

> **Principal:** … I have to echo what [the Teacher Association Pres.] says, I was concerned with what an impasse would do with this [process]. I felt a little discouraged, and felt this might have a negative impact. But I guess, you know, it makes you think about those systems too, and how they will impact what we are doing.

Superintendent: I think we need to look at that as a learning opportunity. We need to perhaps reflect and talk about [putting a] program in place to try to help the situation, use it as a learning experience and turn it into a positive.

Following the reflections, one of the facilitators then tried to focus the conversation on Team Learning—one of Senge's five disciplines—and whether or not the Core Team should use an agenda to guide their meetings. The facilitator first helped the Core Team to situate the notion of an agenda and dialogue within Team Learning.

Facilitator 1: One of the things has to do with the notion of agenda, and I think Peter Senge, when he was talking about dialogue, mentioned that you shouldn't bring an agenda—that in terms of trying to have true dialogue and trying to foster team learning, … it is good to be fluid and to pursue whatever directions seem important at the time. I think that is very true for team learning …. We thought it might be helpful to have a very brief discussion about your thoughts on an agenda. Whether an agenda ought to be prepared for each of our meetings, or whether we should perhaps at the beginning of the meeting put up a list of things that might be important items to address during the meeting and then kind of fluidly address whichever ones seem most important in order of importance.

Principal: I don't think we need so much of an agenda as just somebody overseeing what we are learning. Conceivably we could lose time I'm afraid by not having any direction. I think Senge is right, sometimes dialogue has to be in a free form vein, and there is nothing wrong with that. But we still have a lot to learn, too, so I think there has to be a balance.

It should be noted that, in addition to the reading plan that was developed by the Core Team and the facilitators, a handout was developed by the facilitators and sent to the Core Team members over email as an attachment. The handout included guiding questions for each of the five disciplines from chapter 2 of *Schools that Learn* (see Table 14). Each question is followed by the

page number(s) where the answer can be found. The guiding questions on the handout were constantly used to focus the Core Team's discussion of the readings on Senge's five disciplines.

The dialogue then started to transition into how the members of the Core Team were beginning to make meaning and apply their understanding of systems thinking to their own lives. They were beginning to think systemically about solving problems, and they were making connections among systems.

> **Teacher Association Pres.:** The readings made me think systemically in my regular everyday life. …I find myself solving problems or thinking about problems in a systemic way. You know what I mean? It's really strange.

Table 14: Guiding Questions for Senge's Five Disciplines of Organizational Learning

Senge, *Schools that Learn*: **Chapter 2: Guiding Questions**

1. Personal Mastery
What are the two major aspects of personal mastery? (p. 59)
Why is it important that they create a state of tension? (p. 59)
Why is solo reflection the only way to develop personal mastery? (p. 59)
Why is the development of personal mastery a life-long process? (p. 59 -60)

2. Mental Models
The discipline of mental models entails bringing tacit assumptions, attitudes, and beliefs to the surface. Why is this important? (p 67)
What is the ladder of inference? (p. 68-71)
What is the reflexive loop? (p. 71)

3. Shared Vision
What is the discipline of shared vision? (p. 71-3)
What do tools and techniques have to do with shared vision? (p. 72)
What does shared commitment have to do with it? (p. 72)
What do values, goals, and images have to do with it? (p. 72)
How important are openness and disclosure? (p. 72)
How important is dialogue?

4. Team Learning
What is the discipline of team learning? (p. 73-74)
How does the concept of alignment relate to team learning? (p. 74)
How does the concept of "collective inquiry" relate to team learning? (p. 73)
What role do communication skills play in team learning? (p. 74)
How important is dialogue about core values and beliefs? (p. 74)
What is dialogue? (p. 75)
What does it mean to suspend your assumptions, and why is it important? (p.85-6)

5. Systems Thinking
What is the discipline of systems thinking? (p. 78-9)
What is the "iceberg" of events, patterns, structures, and mental models? (p. 80-83)
What are system dynamics, and why are they important? (p. 84)
Two kinds of system dynamics are "reinforcing processes" and "balancing processes." What are each of them, and why are they important? (p. 84-86)
Three ways of describing system dynamics are causal-loop diagrams, stock-and-flow diagrams, and simulation models. What is each, and what are the advantages and disadvantages of each? (p. 86-90)
What is "delay," and why is it important? (p. 91)
There are many "systems archetypes" that help us understand the behavior of systems (system dynamics).
One of these is "Fixes that Fail." What is this archetype, and why is it important for us to understand? (p. 91-2)

Principal: It's seeing the connections between things you might not have noticed before.

Superintendent: I find myself thinking [about] the decisions I make—how they are connected to everything else I do. And I didn't do that as much before. I think this has caused me in the short time we have been together to take time to think of the connectivity of how this system is going to impact this other system and all the other many systems. I see myself doing that more.

Board Member: Working and spending time with this group on the readings, has helped me put a perspective on life on how everything is connected.

Principal: I think one of the things I noticed was that I think I have had some propensity toward being a systems thinker without knowing what it was. When I became a principal, I always had this gut understanding that every decision that I made had a ripple effect well beyond the circumstance of the decision that had to be made. Also I had some rudimentary sense that my school was a system, and that we had to figure out how all the parts worked together. And what would happen if part A didn't work, what would happen to part B. And so I have some sense of being able to do that or thinking like that on a rudimentary level. So learning about this a little more in-depth is good for me, it's helpful. It makes me feel like some of the decisions that I have made—the ways that I have moved my school along toward our vision—has probably been OK. Not perfect, but OK.

The Core Team also began to discuss and make meaning of the discipline of Personal Mastery.

Principal: [Personal Mastery] is what you want and what you have.

Facilitator 1: Yes, if you have everything you want, there is no tension, and therefore nothing to do. You certainly won't have any change if you don't have tension. Senge talks about solo reflection as the only way to develop Personal Mastery. It's not something that we can do here as a team. It's something that you each have to do individually. You have to get in touch with what your personal visions are and how those differ from your current state. You have to prioritize your different visions, because certainly you have many different visions in many different aspects of your life—your personal life and your professional life and so forth.

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> **Teacher Association Pres.:** What if your vision was exactly what you are?

> **Facilitator 1:** Then you are not going to grow. I think it is a natural human condition to want better than what you have. Why is Personal Mastery a life-long process?

> **Principal:** Because it is about balance, balancing what you have against what you want, and whether what you want is good for you and the rest of the people in your life.

In the following passage, facilitator 1 concludes the conversation on Personal Mastery by using journeying across the land as a metaphor for Personal Mastery:

> I find it helpful to think of this notion kind of like a journey that I'm going on in my life. In this journey, like journeying across the land, you can only see as far as the horizon. And so you can set a goal for where you want to go, and that's your personal vision in terms of what you can see from that particular vantage point. But then as you move towards your goal, your horizon moves too, and you can see things that you couldn't see before. And so it becomes possible to set new goals. And once you get to that destination, you are not going to stop your journey there; you'd need to decide where to go next from there. So setting personal vision is something you have to continuously do throughout your life, as new horizons become visible. (Facilitator 1, Tape recording, August 6, 2001)

Meeting 3: August 28, 2001

On August 28th, 2001, the Core Team met to discuss two more of Senge's five disciplines: Shared Vision and Team Learning. One of the Core Team members began to make a connection between Personal Mastery (a concept they discussed at the previous meeting) and Shared Vision.

> **Principal:** When I first became a principal, I knew that I was missing something, but it was very hard for me to get a handle on what that was. What I came to terms with what was missing, was my vision of what I wanted my school to look like. I couldn't do anything very effectively about communicating what we needed to do to get

better, or even help teachers figure out, or have teachers help me figure out what we needed to do to get better, if I didn't have some sense of what we should look like as a school. That was a slippery concept for me when I first became a principal. … And then what I learned was that I could have this great pie in the sky vision, and I had to have that first. I felt that was step number one, I had to decide what I thought we had to look like in terms of instruction, and the way we behaved towards kids and parents. But the next step was allowing the people that I work with to alter my vision because of their expertise, and how do you do that and what vehicle do you use.

The principal was coming to understand that she needed to start with a personal understanding of the current reality within her school, while developing her personal vision of what she felt her school should look like. Most importantly, she understood that she needed to share her vision with the visions of her teachers and staff in order to come to develop a shared vision of her school system. She also understood that she needed to be open to the ideas and visions of her colleagues, and she understood the necessity of helping to evolve the thinking of her colleagues.

Principal: What I caught myself doing on several occasions was figuring out how to get people to agree to what I wanted, rather than allowing them to influence what I thought I wanted. And so that was kind of a fine line. You have to get out of yourself and respect that the people that you work with and for might know something that you don't know, and you've got to be a learner, and let them tell you what they think will make their school better.

One of the facilitators and the superintendent offered strategies for helping people to engage in a process of building a shared vision.

Facilitator 1: So you have to model the kind of willingness to change your vision that you want others to engage in.

Superintendent: In building a shared vision you have to deal with the conflict before you find the answer.

The Core Team members were beginning to understand that in order to develop organizational learning and more specifically the Team Learning discipline, they needed to, as one facilitator stated:

Engage in a process that helps us to reach an ideal common vision of what our school system will be like. Talking about building a shared vision, broad stakeholder involvement, building trust and respecting other people's viewpoints, give us some kind of a fuzzy vision of what our process needs to be like. We have the beginnings of a shared vision of our process. (Tape recording, August 28, 2001)

He further explained that:

An important part of the overall process is together we redesign each part of the process as we get to it. As we go through this process, we will be bringing greater clarity to what the shared vision of the process should be like. The discipline of Shared Vision is important for 1) developing our shared vision of the process/journey and 2) developing a shared vision of our ideal educational systems for the kids. (Tape recording, August 28, 2001)

Meeting 4: September 4, 2001

On September 4th, 2001, the Core Team met to continue to review the five disciplines. In particular, they discussed the meaning of Mental Models and

Systems Thinking. To help the Core Team understand the concept of a Mental Model, the facilitators asked the Core Team members to refer to their reading on Mental Models, in particular page 71 from *Schools That Learn*. To help the Core Team members to grasp the concept of Mental Models, the facilitators used Senge's visual of "the *Ladder of Inference*— a common mental pathway of increasing abstraction, often leading to misguided beliefs" (Senge et. al., 2000). While explaining each of the steps on the ladder, one facilitator stated,

It is important for each and every one of us to keep in mind the importance of probing the rationale, uncovering peoples' assumptions. When someone says something that is pretty high up in the Ladder of Inference, probe the lower levels. I think all of us need to keep on our toes about that. Part of what is going to be important for us as a Core Team to be effective is to unearth each other's assumptions. (Facilitator, Tape recording, September 4, 2001).

There are 6 steps on the *Ladder of Inference* once an individual observes a situation. Step 1: the individual selects a portion of that observation. Step 2: Based on the individual's previous experiences and cultural background, he or she makes meaning from the observation. Step 3: the individual makes some assumptions based on his or her interpretation or meaning making of the observation. Step 4: the individual draws some conclusions. Step 5: the individual begins to adopt some beliefs based on that observation. Step 6: the individual takes actions based on these beliefs.

The facilitators then referred to the *Iceberg* on page 80 of *Schools That Learn*, to help the Core Team members make a connection between Mental Models and Systems Thinking. The part of the Iceberg that people can see that is above the surface of the water is the events that people see happen in reality. The part of the Iceberg that is below the water is rarely seen by most people. It is much larger than the part that can be seen above water. It is the patterns/trends, systemic structures, and mental models that most people never investigate.

The facilitators asked the Core Team to identify a critical event that occurred within the school district that they could use as an example to walk through the *Iceberg* visual. The collective bargaining process was too sensitive a topic to discuss since the teachers' association president, superintendent and board member were all on the Core Team and key participants in the bargaining process. Some of the critical events that were suggested by the Core Team members include: hiring of the superintendent and a case in 1971 where a student shot her brother.

They decided to use the hiring of the superintendent as the critical event. Unfortunately, there was not enough time left in the meeting to walk through all four steps of the *Iceberg* using the example. Much of the discussion time focused on describing the critical event, which is the first of four steps outlined in the *Iceberg.* The facilitators quickly explained the next two steps of the *Iceberg* (patterns/trends, and systemic structures) to help the Core Team understand how they could apply their critical event to these steps. Finally, the facilitators emphasized that mental models (the fourth step of the *Iceberg*) are the key to

systemic change and systems thinking. One facilitator stated: "If you don't

change anything on the mental model level, nothing else is going to change"

(Facilitator 1, Tape recording, September 4, 2001). In summarizing her

understanding of mental models, one Core Team member stated, "So it is

basically understanding how everyone formed the opinion that they have, and the

dialogue in understanding why they feel that way, or what did they see [that

made them feel that way]"(Parent, Tape recording, September 4, 2001).

Meeting 5: September 12, 2001

On September 12th, 2001 the Core Team met to review one of the

systems simulations found in Senge's *The Fifth Discipline*. The facilitators felt

that reading the simulation called "The Beer Game" was not as theoretical and

abstract as some of the other parts of the book; they therefore assigned it to the

Core Team to read at the conclusion of the last meeting. The facilitator led the

discussion by referring to specific statements within that section of the book. The

following dialogue is an excerpt from the tape recording (September 12, 2001):

> **Facilitator 1:** Starting on page 40, it starts to give the lessons of the
> Beer Game, and it talks about a number of things… Structure
> influences behavior, structure in human systems is subtle, leverage
> often comes from new ways of thinking. But there were a few
> things in the ensuing discussion that I thought were particularly
> interesting. One of them is a statement he [Senge] makes on page
> 41: "There were no villains, but there was a crisis nonetheless, built
> into the structure of the system." I thought that was a particularly
> interesting and important insight. To me when we look at the
> problems that schools are having, problems with violence in the
> schools, problems with kids not learning what they are supposed to
> learn, and such, I think that really rings true—that there aren't any

> villains; everybody is trying to do a good job at what they are trying to do.

> **Teacher association pres.:** That's how I feel about bargaining right now. When I look at somebody, I can't say they're a villain. I can't point my finger and blame anything on anybody. And people remind me of this, the teachers they'll say, "I really think they [School Board] believe they are doing the right thing. I really don't think they are trying to be mean. They believe this." Even if you take one board member in particular, who thinks teachers make too much money, well that is their belief system. I can't really say they are a villain. I have no ill feelings for them. I try to be a "turn the other cheek" person.

> **Principal:** You know, it reinforces for me that what we are learning here is right, because they [certain board members] don't see how they are disrupting the systems and how each system, the system of teachers, the system of administrators, the system of the school board—they don't see any connection, so there is no way for them to understand how their behavior changes each of those systems and creates the conflict.

Throughout the meeting the facilitators continued to point the Core Team to specific passages from the reading, and then the Core Team members applied the systems principle found in the passage to their own experiences in the school district.

Meeting 6: September 25, 2001

On September 25th, 2001 one of the facilitators gave a PowerPoint presentation that helped the Core Team members to think about the following questions: What is systemic change and is it needed here in this district? What might an example of systemic change be like, and what might a systemic change process be like? The presentation was highly interactive, and it also emphasized the importance of mental models, mindset change, and involving all stakeholder

groups in the change process. One of the facilitators provided the following

rationale for the presentation:

> I hope this [presentation] may be helpful in terms of giving a little bit more,
>
> something a bit more concrete, to the whole notion of systemic change.
>
> We've been doing a lot of discussing the last couple of weeks about
>
> systemic change, and it's been pretty abstract. I was getting a little
>
> concerned that it was becoming too abstract and we were losing some of
>
> the motivation in how things would be implemented. Hopefully, this
>
> [presentation] gives an idea of how some of the kinds of things we've been
>
> talking about from Senge would be relevant to the process that we're
>
> trying to invent here for [the school district]. (Tape recording, September
>
> 25, 2001)

Following the presentation, the facilitator asked the Core Team to take the rest of

the meeting time to reflect together on how the change process has affected their

mental models and mindsets. The following is a dialogue among the Core Team

members and the facilitators during the September 25th meeting.

> **Board member:** I now try to analyze what's going on through a systems
> process. I've been doing it at work, too, and it drives all the guys
> crazy. Trying to understand how that works, better helps me
> understand how I work. And maybe how I better handle a situation
> that may come up …. I think in that sense it has helped me grow
> as an individual.

> **Superintendent:** I think this process has really reinforced my belief
> system, and what I believe in working with people as a leader. It's
> reinforced those beliefs. It's put more meaning into some things
> that I believe but really didn't know why. Now I understand better
> why change just won't happen, that to get a paradigm shift of this
> magnitude, it is going to take a really large effort on the part of the
> entire community. I can't do it by myself. I'm different from many

leaders in schools, I have a totally different view of leadership from my counterparts out there, and I am in the minority. Some people would like for me to be wrong, that my way will not work. But it will work, and it has worked. I think this has helped me to understand some of the obstacles that I have faced in the past, but I understand it better and why they are obstacles, and what we must do to get around those obstacles.

Teachers' association pres.: It has been a test in patience; I'm a very impatient person. Every time I come, I think, "What am I doing here?" because I have no patience. I'm just not the best person to be here 'cause I have no patience. You need a very patient person to be on this committee, 'cause it's gonna be slow, and I just don't do well with slow.

Facilitator 1: But it's also good for a team like this to have someone who is pushing for faster.

Teachers' association pres.: Patience is my biggest weakness as a teacher. So it has been torture, but it makes you grow though.

Facilitator 2: So is this process making you more patient?

Teachers' association pres: Yes, I am going to use the word "making," because I don't do it on purpose.

Facilitator 1: Has your mindset changed at all, in terms of understanding the process of systemic change? Understanding the importance of trust and collaboration, and broad stakeholder involvement and all the kinds of values that we've talked about. Do you have a different perspective at all on change or the educational system?

Teachers' association pres.: I feel like it can work, but we have a long way to go.

PTA/O Pres.: Well, I've learned a lot about the educational process. … I'm hoping that other people will learn my patience. But I definitely learned a lot. I'm really enthused about our change [process].

Meeting 7: October 9, 2001

On October 9th, 2001, the Core Team was having a hard time grasping the concept of reinforcing and balancing processes. So the facilitators helped the Core Team to create a causal-loop diagram using the collective bargaining process. We followed the process for creating a causal-loop diagram outlined on pages 87-88 in *Schools that Learn*. It was important for the Core Team to choose a key starting variable and then identify other elements that would have an effect on this variable. The Core Team identified "understanding of data" as the key starting variable. The following questions guided the creation of the diagram: What causes an increase or decrease in "understanding of the data"? What does an understanding of the data influence? (See Figure 3 for the causal-loop diagram developed by the Core Team).
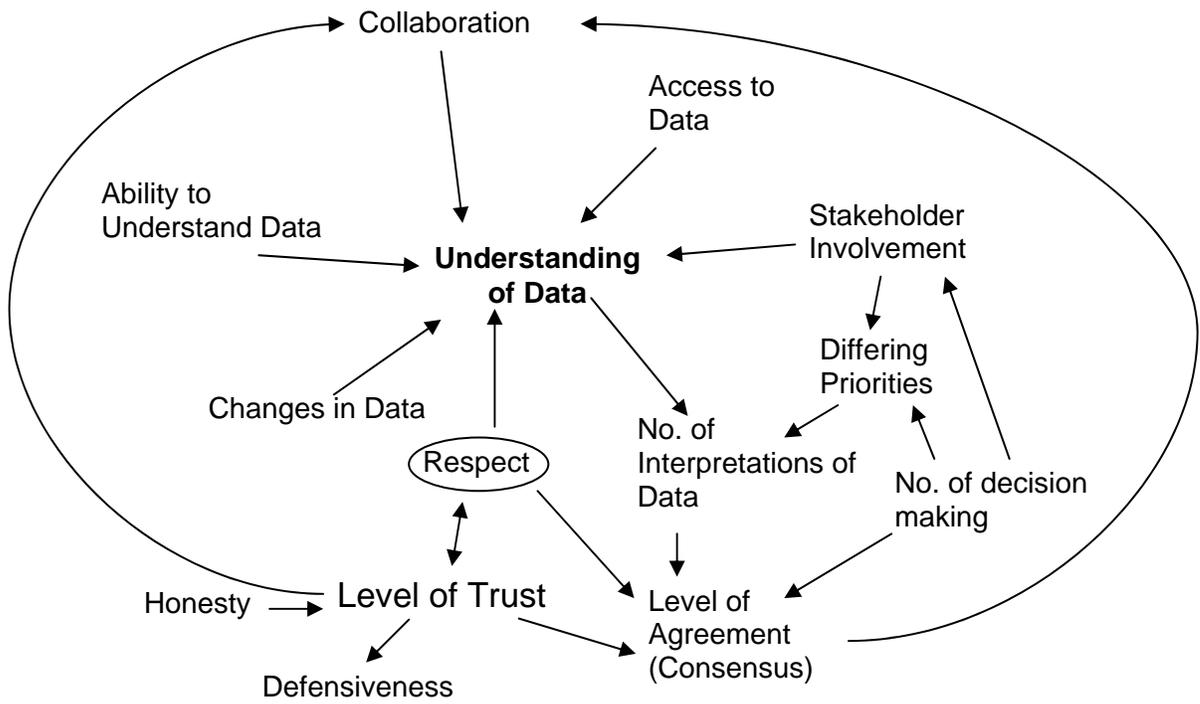
Figure 3: Causal-Loop Diagram: The District's Collective Bargaining

Understanding the school budget data was especially important for the teachers'

association, to understand that the school district could not support an increase

in teacher salaries at that time. The Core Team members explained that there

were several variables effecting how people understand the data. For example,

Figure 3 shows that when a group of people try to understand a set of data (in

this case it was the school budget), inevitably a number of interpretations of that

data will emerge; in turn making it difficult for the group to come to consensus.

Issues of trust and respect among the people trying to understand the data also

have an effect on how they come to consensus and collaborate on understanding

the data.

What did and did not work well?

Based on the observations of the facilitators, overall the redesigned

process within Event 7 worked well in that it helped the facilitators and the Core

Team to develop their understanding of systems thinking. The previous section

described the redesigned process for Event 7. In this section, the researcher will

describe what went well and what did not work well as this redesigned process

was implemented in the school district. The researcher could not formatively

evaluate the original Event 7 since it was redesigned so significantly in this case.

As mentioned earlier, the facilitators decided to significantly redesign the

guidance offered by the GSTE, because it seemed too early in the process to

start reviewing systems theory and educational systems design in depth with the

Core Team. Many of the concepts were too theoretical to address so soon,

without providing the Core Team with some foundational knowledge about the principles and the process of organizational learning.

Additionally, the Core Team members also felt that the first book assigned (*The Fifth Discipline*) was too theoretical for them to start out with. One Core Team member commented, "this [Senge's *Schools that Learn*] is easier for me to read than *The Fifth Discipline* was" (Parent, Field notes August 6, 2001, p. 5). Another Core Team member stated that: "we started out reading Senge's *The Fifth Discipline*, right? Well I don't think you need to do that. I think going strictly straight to Senge's *Schools That Learn* can really focus and make it relate better to school people" (Superintendent, May 20, 2002, p. 3). The facilitators both felt that, based on the Core Team members' reactions to some of the initial readings, they made the right decision in redesigning Event 7 for this case.

A reading plan was developed to help guide the Core Team in reading *Schools that Learn* (see Table 13). The plan was developed by the facilitators and the Core Team members approximately one month after the Core Team retreat. Additionally, the facilitators developed a handout with guiding questions (see Table 14) to help the Core Team members identify the key points within the readings. Both of these worked well to guide the learning of the Core Team. They helped to provide the Core Team with a structure to guide their learning process.

The facilitators felt that it was important for the Core Team to begin to take ownership of their learning process, by having them create their own reading plan (with guidance from the facilitators). This worked out particularly well because in addition to the content, they were able to negotiate the amount of

readings they were going to be able to handle individually and collectively. The guiding questions were developed by the facilitators. These questions were beneficial in several ways. First, they helped the Core Team members to guide and focus their reading. Second, they served as a guide for the facilitators during the discussion of the readings at the Core Team meetings. Third, they also served as a kind of syllabus, providing everyone with a general guide throughout the implementation of this Event of what was learned and what still needed to be learned.

The book, *Schools that Learn,* by Senge worked well since it was catered to educational practitioners. The Core Team members seemed to relate well to reading *Schools that Learn.* The concrete examples and the instructional strategies incorporated throughout the book and particularly within the chapters studied in this case worked very well in helping the Core Team members negotiate the meaning of each of the five organizational learning disciplines: Personal Mastery, Shared Vision, Team Learning, Mental Model and Systems Thinking.

The various instructional strategies used by the facilitators (e.g., dialogue, group reflections, visuals, metaphors, guiding questions, and simulations) seemed to work well in helping the Core Team members to negotiate and make meaning of Senge's five disciplines for developing a learning organization. Visuals seemed to work particularly well in this case for helping to facilitate the Core Team's learning. The visuals included *the Ladder of Inference,* which was used to help the Core Team to understand Mental Models, and *the Iceberg,*

which was used on many occasions to help the Core Team members to understand Systems Thinking and the connection between Systems Thinking and Mental Models. Reading and discussing the *Beer Game* simulation helped the Core Team members to understand various systems principles, which they were then able to apply to real-world examples from their school district. Another indication of their learning was when they created a causal-loop diagram using an actual event that was occurring in their district to help them understand the systemic nature of the problem. All these instructional strategies seemed to work well in this case to help facilitate the Core Team learning process.

On May 20, 2002 (during the 2nd Core Team Retreat), the facilitators and the Core Team took some time to debrief the implementation of the redesigned Event 7. The facilitators asked the members what they thought did and did not work well with the redesign and implementation of the Event. There was some discussion on the format (series of meetings or a one-day retreat) and timing (either prior to, during or after the retreat experience) used to introduce Peter Senge's five disciplines to the Core Team. Some of the Core Team members suggested that the Event could have been implemented more efficiently during a one-day retreat focusing on Senge's five disciplines. In this case the Event was implemented during seven Core Team meetings. One Core Team member stated:

> Not to your discredit in any way… the learning for me was real disjointed. I wasn't sure where we were going next and what our objectives were, what I was supposed to do with the information. So yes, if you could have a day

devoted to Senge, that would be really helpful. (Principal, May 20, 2002, p. 4)

One Core Team member felt that it would have been more helpful to her learning if Senge's five disciplines were reviewed sometime prior to or during the first Core Team retreat. She said

> I'm not sure I agree with … the studying of Senge's five disciplines [after the first retreat], because that was very helpful to me to understand mindsets. I think it would have helped me a lot if we had done that in the beginning (Parent, May 20, 2002, p. 3).

The facilitators felt that there were times when some members of the Core Team did not complete the assigned readings. Understandably all the members of the Core Team were very busy throughout the process. The facilitators did try to address the problem by explaining to the Core Team how important it was for them to come prepared to each of the Core Team meetings. The facilitators also sent out email reminders about the readings prior to each Core Team meeting.

Recommendations for Improving Event 7 in this Case

The description above of what happened, and what did and did not work well, is based on the researcher's observations and the Core Team meeting recordings. As such the following recommendations for improving Event 7, within the context of this case, are offered here. The recommendations are presented in two sections: 1. Recommendations to keep what worked well in this case, and 2. Recommendations to improve what did not work well in this case.

Recommendations to keep what worked well in this case

- The process that was designed in this case worked well for helping the Core Team develop a knowledge base in the five disciplines of a learning organization. In particular the reading plan and guiding questions worked well in helping the facilitators to guide the Core Team's learning process.

- The book, *Schools that Learn*, by Peter Senge was a good choice for introducing the Core Team to Systems Thinking and the other disciplines. The book made the theoretical concepts accessible to the Core Team members, and it provided good examples to help the Core Team members to apply the concepts within their own situations. The book was well suited for the educational stakeholders in this case.

- Various instructional strategies were used to help the Core Team members to understand Senge's five disciplines: dialogue, group reflections, visuals, metaphors, guiding questions and simulations. These strategies seemed to work well. It was evident to the Facilitators that the Core Members were learning, since they were able to apply what they were learning to real-world situations within their school district. The dialogues and group reflections seemed to be effective in helping to develop a safe space, where the Core Team felt comfortable to negotiate the meaning of each of the five disciplines. Visuals such as the *Ladder of Inference* and the *Iceberg* were used to help the Core Team make meaning of Mental Models and Systems Thinking. These visuals were particularly helpful for providing a visual dimension to the

abstract and theoretical concepts being learned (e.g., Mental Models, and Systems Thinking). In this same way, a metaphor was used by the facilitator to show the similarity between Personal Mastery and a journey across the land. This also helped to take an abstract concept and relate it to a situation that was familiar to the members of the Core Team. The Beer Game simulation was used to help the Core Team to understand various systems principles. This simulation was especially helpful in providing a real-world simulated experience, and then allowing the Core Team members to analyze the simulated experience using the systems thinking knowledge that they were developing. The Core Team created a causal-loop diagram using an actual event that was occurring in their district to help them understand the systemic nature of the problem. This seemed to be a clear indication that they were learning how to think systemically.

- Some of the Core Team members felt that the learning was disjointed, and that this problem could have been remedied with a one-day retreat devoted to the five disciplines of organizational learning. Perhaps the case could have been improved if the review of the readings had been implemented in a one-day retreat, rather than spread out through seven Core Team meetings. However, the researcher believes it was wise to spread the learning out over time, as was done in this case. This provided the Core Team members with the time necessary to read, review, synthesize and apply the learning organization concepts. Most importantly, by spreading the learning out over several meetings, the Core Team members were beginning to learn how to

learn and reflect together. This probably could not have been accomplished in

a one-day retreat.

Recommendations to improve what did not work well in this case.

- The book, *The Fifth Discipline*, by Peter Senge was not a good first choice to

introduce the Core Team to Systems Thinking. The Core Team members

expressed that the readings from this book were too theoretical and abstract.

This case might have been improved if the Core Team started to read

Schools that Learn first. The choice of whether to start with *The Fifth*

Discipline or *Schools that Learn* seemed to be dependent on the Core Team

members' prior knowledge of the five disciplines.

Discussion of the Findings

These results provide significant evidence that the overall process outlined

in the redesigned Event 7 worked well for developing the Core Team's

knowledge base in developing a learning organization. It was believed and

confirmed that the original Event 7 (particularly activities 7.2 and 7.3) was too

theoretical and abstract for the Core Team members in this case. Therefore, the

Event was redesigned to meet the needs of the members of the Core Team. As

stated earlier, Jenlink et al. (unpublished manuscript) recommend the following

process activities for achieving the goals of this Event, which is to develop the

capacity of the Core Team in Systems Design:

7.1 Explore Purposes, Beliefs, and Values about the Change Process

7.2 Explore Educational Systems Design and Systems Theory

7.3 Apply Educational Systems Design and Systems Theory

The redesigned Event 7 did not really address fundamental issues of beliefs, purposes, and values about the change process that were outlined in activity 7.1 (from the original Event). Skipping activity 7.1 (following the Core Team retreat) was unlikely to have hurt the process in any way. The facilitators did convey that they felt the way they used the time leading up to the retreat (i.e., to develop the agreement and design the retreat) may have contributed to helping the Core Team explore their purposes, beliefs and values about the change process. Additionally, the activities that were implemented in this case to help the Core Team learn about how to learn together, most likely helped the Core Team to explore their beliefs about the change process. Perhaps the most effective point in the process to explicitly work with the Core Team on exploring the ideas outlined in activity 7.1 is during the Core Team retreat when values about the change process are reviewed.

Instead of following the process outlined in activities 7.2 and 7.3, the facilitators and the Core Team decided to develop their capacity by learning about Senge's five disciplines of a learning organization. Senge's (1990) definition of learning organizations captures the main reason why the participants in this case redesigned the original process outlined in Event 7.

> [Learning organizations are] organizations where people continually
>
> expand their capacity to create the results they truly desire, where new
>
> and expansive patterns of thinking are nurtured, where collective

aspiration is set free, and where people are continually learning how to

learn together. (p. 3)

It seemed appropriate for the Core Team members to develop the tools that

would help them begin to learn how to learn together prior to engaging in the

original activities outlined within Event 7. Many researchers are beginning to

agree that developing a learning community is critical for a systemic change

process to succeed (Darling-Hammond, 1996; DuFour & Eaker, 1998; Fullan,

1993; Louis & Kruse, 1995; Newmann, Wehlage, & Wisconsin Center for

Education Research. Center on Organization and Restructuring of Schools.,

1995; Senge, 1990).

For the success of their change effort, the Core Team expressed that it

was important for them to begin to develop a learning community. The

researcher therefore recommends that the activities designed in this case be

inserted in place of the original Event 7 of the GSTE outlined above. Additionally

it is recommended that the original Event 7 be moved to a point later in the

process after the Core Team has expanded into the Decisioning Team.

Criteria for judging what worked well in this case

The major criteria for judging whether or not each event and the activities

of the event worked well rest upon whether the goals of the event were met. In

this event a successful Core Team learning process was the key criterion for

judging whether or not the event worked well. This included the extent to which

the Core Team was learning how to become a learning community, and learning

how to learn. Also the amount of time it took to implement the event was an important criterion.

Summary

Overall the researcher found that the redesigned Event 7 for developing the Core Team's knowledge base in Senge's five organizational learning disciplines worked well in this case. In particular, seven meetings were devoted to learning about Senge's five disciplines for organizational learning. His book, *Schools that Learn*, turn out to be a good choice for the Core Team since it helped to make the theoretical concepts more accessible than the first book that was chosen (Senge's, *The Fifth Discipline*). There were various instructional strategies used to help facilitate the learning of the Core Team members (e.g., dialogue, group reflections, visuals, metaphors, guiding questions and simulations). They worked well in helping them to apply what they were learning to real-world situations in their school district. Most importantly the dialogues and group reflections worked well in creating a safe space to create a learning community. Based on these findings from the case, the following is a summary of the researcher's major recommendations for improving the GSTE:

- The activities designed in this case should be inserted in place of the original Event 7 of the GSTE outlined above.
- It is also recommended that the original Event 7 be moved to a point later in the process after the Core Team has expanded into the Decisioning Team.

Conclusion

A substantial amount of data has been present to the reader in this chapter. Tables 15, 16, and 17 provide an overall summary of the strengths and improvements for each of the three Events described and analyzed in this chapter. For each Event the reader was provided with a description of what happened as the event was conducted, and an evaluation of what worked well and did not work well. Additionally, each section included tentative recommendations for improving the event within the context of the study, as well as a discussion of the findings for that event. In chapter 5, the next and final chapter, the researcher provides a discussion of the implications, limitations, and recommendations for future research.

Table 15: Summary of Event 5 Strengths and Recommended Improvements

Event 5: Select the Initial Core Team	
Strengths	Improvements
• Whenever it was possible, in order to build neutrality, the facilitator(s) made personal phone calls to invite the prospective Core Team members or to initiate a stakeholder group's selection of their own representative.	• The Core Team should have included a member of the support staff to serve on the Team.
• Whenever it was possible, each of the stakeholder groups selected their own representative to serve on the Core Team, using the criteria specified by the GSTE.	• The Core Team should have developed ways of getting student input throughout the process without requiring that they serve on the Core Team.
• The superintendent and the facilitator(s) worked closely together in selecting members of the Core Team.	• The facilitators and the superintendent should have taken the time to discuss and come to consensus on the issue of including a contrarian on the Core Team.
• The facilitators used their previous meetings with each of stakeholder groups to help offer the superintendent advice about which members from each group would make a good fit on the Core Team.	

Table 16: Summary of Event 6 Strengths and Recommended Improvements

Event 6: Create the Core Team Dynamic	
Strengths	Improvements
• The facilitators most likely made the right decision when they elected to skip activity 6.1. Otherwise, they could have wasted the Core Team's time, and jeopardized their motivation for the process.	• The co-facilitators believe that the retreat experience could have been improved for them and for the rest of the Core Team if an experienced outside facilitator had been able to facilitate the retreat.
• Delaying the Core Team retreat was likely a good thing for this case. The Core Team members were very busy during the school year, and felt that postponing the retreat until the summer would allow them to focus on the process with minimal distraction from their school responsibilities. It also allowed motivation to be increased to the point where the members were willing to devote the time to a two-day retreat.	• The Core Team members expressed that journaling their reflections would have helped them make meaning of the various concepts they needed to understand during the retreat experience.
• During this delay time the facilitators and the Core Team were able to continue to work on other important aspects of the change process (e.g., develop ground rules for Core Team meetings and develop an understanding about the change process).	• The Core Team members felt that more 'trust building' and 'get to know you' activities were needed during the retreat.
• The agenda developed for this case worked well, as the activities helped the Core Team members to begin to develop a team dynamic by getting to know one another better, developing trust, and understanding the change process.	

Table 17: Summary of Event 7 Strengths and Recommended Improvements

Event 7: Capacitate the Core Team in Systems Design	
Strengths	Improvements
• The process that was designed in this case worked well for helping the Core Team develop a knowledge base in the five disciplines of a learning organization.	• The activities designed in this case should be inserted in place of the original Event 7. • Consider moving the original Event 7 to a point later in the process after the Core Team has expanded into the Decisioning Team.
• The book, *Schools that Learn*, by Peter Senge was a good choice for introducing the Core Team to Systems Thinking and the other disciplines.	• The book, *The Fifth Discipline*, by Peter Senge was not a good first choice to introduce the Core Team to Systems Thinking. The Core Team members expressed that the readings from this book were too theoretical and abstract.
• Various instructional strategies were used to help the Core Team members to understand Senge's five disciplines (e.g., dialogue, group reflections, visuals, metaphors, guiding questions and simulations). These strategies seemed to work well in helping the Core Team to understand the five disciplines.	

CHAPTER 5: CONCLUSIONS

This chapter provides first, implications for the researcher's conceptual framework presented in chapter 2. The researcher then presents the limitations of the research conducted, followed by recommendations in three key areas: 1) for improving the methodology, 2) for practitioners, and 3) for further research and theory development. Lastly the researcher presents a summary of the case study.

Implications for the Conceptual Framework

The conceptual framework was developed to highlight key elements of a systemic change process (see Figure 1). In chapter 2, these elements served as a lens through which to review important educational change efforts and school change models. Each of the events studied in this case illustrated the importance for at least one aspect of the researcher's conceptual framework. This section will present the three major implications that the findings from this case have for the conceptual framework.

First, in this case, the superintendent, the teachers' association president, a principal, a PTA/O president, and a board member were selected to serve on the Core Team. This demonstrated that diverse stakeholder groups could come together to work on a school district change process. This was a first step in modeling how the school district was going to work collaboratively on developing *broad stakeholder ownership* over the change process. Creating the Core Team

was critical in this case in beginning to develop a culture of change, and in helping people to *evolve their mindsets* and mental models about their assumptions of one another's roles and responsibilities.

Second, the Core Team members then began to move the school district from a culture based on the political principal of decision making (Sarason, 1995) to one based on creating and designing a new educational system (e.g., designing the purposes of the retreat, and designing a reading plan) (Banathy, 1996). The process of forming the Core Team and then developing a design culture on the team, also highlighted some of the challenges a school district must face when attempting to develop *broad stakeholder ownership*. Some of the challenges included the issue of whether or not to invite a key leader who was also a contrarian, and how to begin to include student perspectives in a change process. These findings can help to strengthen and improve the conceptual framework. For example, incorporating the challenges of developing broad stakeholder ownership within the framework can make it a stronger and more valid conceptual framework. Challenges should also be identified for each of the other elements of the framework and incorporated within the framework. One challenge in implementing each of the elements of the framework is the need to make them more accessible to practitioners. In this case, the facilitators needed to use a book that included many concrete and real world examples, and that was less theoretical and abstract. Subsequently, these findings not only help to demonstrate the importance of developing *broad stakeholder ownership* in a

change process, but they also provide us with an example of the inner dynamics and challenges of forming such a group.

Third, the notion of learning about and *developing a learning organization/community* should be incorporated within the conceptual framework as a central element of the process (see Figure 4). Due to the theoretical nature of systems design and systems theory, the facilitators and the Core Team decided to redesign Event 7 to have a strong focus on developing a learning organization. It was important for the Core Team members to learn how to learn together prior to engaging further in the systemic change process. By forging ahead and learning about abstract concepts, without first having the Core Team learn how to learn together may have discouraged them, and they may have lost motivation for the process.

As with all the elements in the conceptual framework, it is necessary to ground the notion of developing a learning organization within the literature. In the following subsection, the researcher will provide a brief review of the literature on learning organizations.

Systems Design

Broad Stakeholder
Ownership

Learning
Community

Understand the
Systemic Change
Process

Systems View of
Education

Evolving Mindsets
About Education
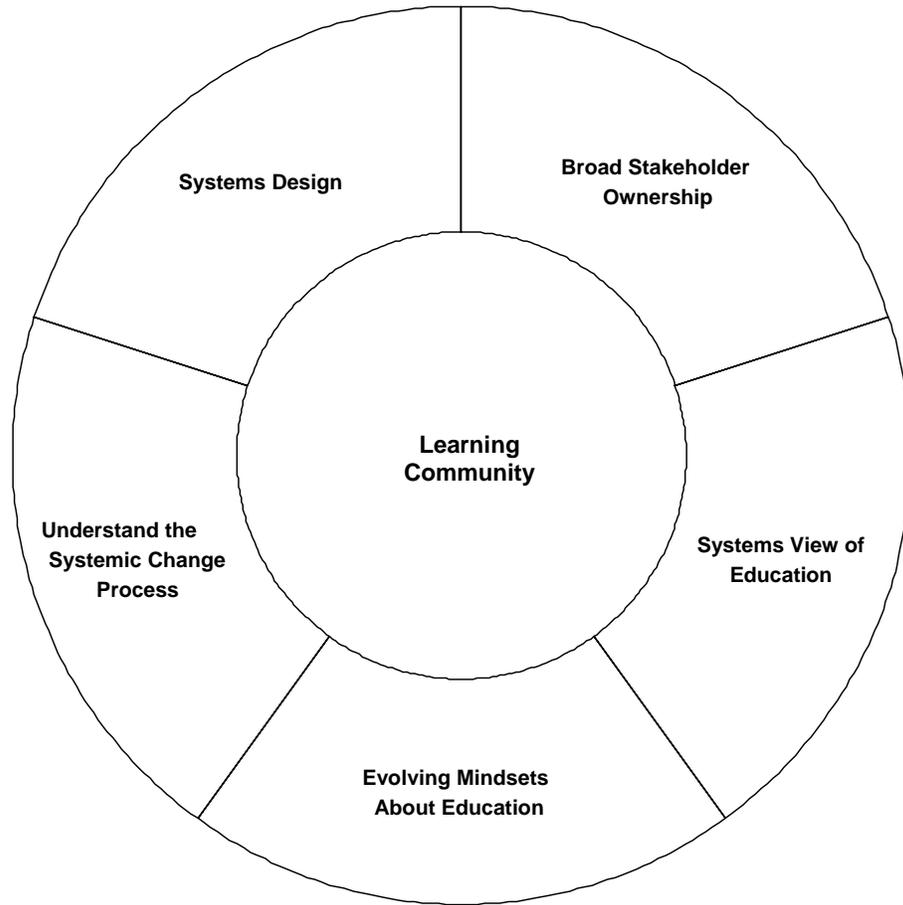
Figure 4: Revised Conceptual Framework

A Brief Review of the Literature on Learning Organizations

Many researchers are also beginning to agree that developing a learning organization/community is an important aspect to understanding the systemic change process (Darling-Hammond, 1996; DuFour & Eaker, 1998; Fullan, 1993; Louis & Kruse, 1995; Newmann, Wehlage, & Wisconsin Center for Education Research. Center on Organization and Restructuring of Schools., 1995; Senge, 1990). DiBella and Nevis (1998) state that "it is important to differentiate between the similar and related ideas of "organizational learning" and the "learning organization" because they are often used interchangeably" (p. 6). They suggest that

> The learning organization is a systems-level concept with particular
> characteristics or a metaphor for the ideal organization… In contrast,
> "organizational learning" is a term used to describe certain types of
> activities or processes that may occur at any one of several levels of
> analysis [individual, team and organization] or as part of an organizational
> change process. Thus it is something that takes place in all organizations,
> whereas the learning organization is a particular type or form of
> organization in and of itself. (p. 6)

This distinction seems to suggest that the learning organization is what an organization strives to become (product), it is the ideal vision of an organization. This distinction also suggests that organizations must develop and implement organizational learning activities (process), strategies, and processes in order to become a learning organization.

According to Bill Mulford (1998):

Organizational learning largely focuses on developing common
understandings, honesty, and trust through dialogue, sharing, and
managing the inevitable conflict involved. These learning processes are
then employed to make links to the outside, to examine current practice
critically, to develop shared values as well as a vision for the school. The
processes, the content (or identified changes), and shared values are
employed to actually make the changes that have been identified,
including a commitment and ability to repeat the stages, that is, to
continuously learn and improve. (p. 619)

According to Senge (1990) the basic meaning of a learning organization is
an organization that is continually expanding its capacity to create its
future. For such an organization, it is not enough merely to survive.
"Survival learning" or what is more often termed "adaptive learning" is
important—indeed it is necessary. But for a learning organization,
"adaptive learning" must be joined by "generative learning," learning that
enhances our capacity to create. (p. 14)

25 years ago Argyris and Schon (1978) argued that organizational
learning was critical to an organization's survival. They defined organizational
learning as "an organization's capacity for conscious transformation of its own
theory of action, and to individuals' ability to appreciate and transform the
learning systems in which they live" (p. 331). Argyris and Schon (1978) define a

company's theory of action as its norms, strategies, and assumptions. According to Argyris and Schon (1978):

> organizational theories of action need not be explicit. Indeed, formal corporate documents such as organizational charts, policy statements, and job descriptions often reflect a theory of action (the *espoused theory*) which conflicts with the organization's theory-in-use (the theory of action constructed from observation of actual behavior)—and the theory-in-use is often tacit.

They suggested that "for systems theorists, organizational learning consists of the self-regulating process of error-detection and error-correction itself, whether or not maintenance of the organizational steady state is mediated by the self-conscious efforts of individual members of the organization" (p. 326). Argyris & Schon (1978) used the term single-loop learning to refer to the self regulating process of error-detection and error-correction. Argyris and Schon (1978) stated that during single-loop learning "members of the organization respond to changes in the internal and external environments of the organization by detecting errors which they then correct so as to maintain the central features of organizational theory-in-use" (p. 18). In organizational single-loop learning, the criterion for success is effectiveness. According to Morgan (1997):

> many organizations have become proficient at single-loop learning, developing an ability to scan the environment, set objectives, and monitor general performance of the system in relation to these objectives. This

basic skill is often institutionalized in the form of information systems

designed to keep the organization "on course" (p. 88)

Single-loop learning by itself does not challenge or question an organization's

theory of action (i.e. organizational norms, strategies, and assumptions). Argyris

and Schon (1978) argued that organizations needed to learn to build the capacity

to challenge their own theory of action. They called this type of learning double-

loop learning which they defined as "those sorts of organizational inquiry which

resolve incompatible organizational norms by setting new priorities and

weightings of norms, or by restructuring the norms themselves together with

associated strategies and assumptions" (p. 24). According to Morgan (1997)

double-loop learning is much more difficult for an organization to achieve. He

states:

the ability to achieve proficiency at double-loop learning often proves more

elusive. Although some organizations have been successful in

institutionalizing systems that review and challenge basic paradigms and

operating norms, many fail to do so. This failure is especially true of

bureaucratized organizations, whose fundamental organizing principles

often operate in a way that actually obstructs the learning process. (p.88)

Peter Senge (1990) identifies seven organizational learning disabilities that can

hinder the organization from becoming a learning organization:

1. I AM MY POSTION: When people in organizations focus only on their

   position, they have little sense of responsibility for the results produced

   when all positions interact. (p. 19)

2. THE ENEMY IS OUT THERE: There is in each of us a propensity to find
   someone or something outside ourselves to blame when things go wrong.
   (p. 19)

3. THE ILLUSION OF TAKING CHARGE: All too often, "proactiveness" is
   reactiveness in disguise. If we simply become more aggressive fighting
   the "enemy out there," we are reacting—regardless of what we call it. True
   proactiveness comes from seeing how we contribute to our own problems.
   (p. 21)

4. THE FIXATION ON EVENTS: Generative learning cannot be sustained in
   an organization if people's thinking is dominated by short-term events. If
   we focus on events, the best we can ever do is predict an event before it
   happens so that we can react optimally. But we cannot learn to create. (p.
   22)

5. THE PARABLE OF THE BOILED FROG: Learning to see slow, gradual
   processes requires slowing down our frenetic pace and paying attention to
   the subtle as well as the dramatic. (p. 23)

6. THE DELUSION OF LEARNING FROM EXPERIENCE: Herein lies the
   core learning dilemma that confronts organizations: we learn best from
   experience but we never directly experience the consequences of many of
   our most important decisions. (p. 23)

7. THE MYTH OF THE MANAGEMENT TEAM: All too often, teams in
   business tend to spend their time fighting for turf, avoiding anything that
   will make them look bad personally, and pretending that everyone is

behind the team's collective strategy—maintaining the appearance of a cohesive team. (p. 24)

Senge (1990) believes that "the five disciplines of the learning organization [Personal Mastery, Shared Vision, Team Learning, Mental Model, and Systems Thinking]… can act as antidotes to these learning disabilities. But first, we must see the disabilities more clearly—for they are often lost amid the bluster of day-to-day events" (p. 26).

In order to identify learning disabilities within an organization, it requires that an organization learn how to learn. Argyris and Schon (1978) borrowed the term deutero-learning from Gregory Bateson to explain their notion of learning how to learn. Argyris and Schon (1978) state that:

when an organization engages in deutero-learning, its members learn, too, about previous contexts for learning. They reflect on and inquire into previous episodes of organizational learning, or failure to learn. They discover what they did that facilitated or inhibited learning, they invent new strategies for learning, they produce these strategies, and they evaluate and generalize what they have produced. The results become encoded in individual images and maps and are reflected in organizational learning practice. (p. 27)

Argyris and Schon (1978) believe that "the quest for organizational learning capacity must take the form of deutero-learning; most particularly about the interactions between the organization's behavioral world and its ability to learn"(p. 29).

Argyris and Schon (1978) argue that without individual learning there is no organizational learning; however they also argue that individual learning by itself is insufficient for organizational learning. Argyris and Schon (1978) state:

> We can think of organizational learning as a process mediated by the collaborative inquiry of individual members. In their capacity as agents of organizational learning, individuals restructure the continually changing artifact called organizational theory-in-use. Their work as learning agents is unfinished until the results of their inquiry—their discoveries, inventions, and evaluations—are recorded in the media of organizational memory, the images and maps which encode organizational theory-in-use. (p.20)

Developing a learning organization/community is the element of the conceptual framework that binds all the other elements together. It is perhaps the most critical element of the systemic change process, and therefore much time and care should be taken to ensure the development of a healthy learning organization/community.

Limitations

In this section, the researcher will highlight several limitations of the study: the narrow scope of the research on just three events, only one iteration in the formative research, and only one case.

Scope of the research – The GSTE is complex, and it has many events that are still in development. It is estimated that it could take 3-5 years to implement the entire theory. As the study was designed, it was not feasible to study all the events of the GSTE in this case study. Instead the researcher decided to focus on a portion of the GSTE, specifically Events 5, 6 and 7. It is expected that additional strengths and weaknesses will emerge as the larger study continues. Future improvements to the events not studied in this case may influence Events 5, 6 and 7. This study could not predict such improvements.

Only one iteration in the formative research – The researchers were only able to formatively evaluate the implementation of each of the events once. For example, the facilitators/researchers were able to work with the superintendent to select the Core Team members, collect formative data on the process used to select the Core Team members, and based on the data make tentative revisions to the GSTE. However they were note able to go through the process of implementing the tentative revisions and going through the process of reselecting Core Team members.

Single Case – Another limitation of the study is that it was an examination of a single case—one school district. Additional case studies should be conducted, and the findings should be compared to the results from this study. It should be noted that the purpose of this study was to improve the GSTE, and to hypothesize improvements to the GSTE. As the GSTE is implemented and evaluated in other school districts, it is expected that additional strengths and weaknesses will emerge that support or contradict the findings from this study).

Developing situationalitities—events or activities worked well in certain situations or conditions but did not work well in others (Reigeluth & Frick, 1999) will be important in cases where a contradiction to the findings in this study may emerge.

Recommendations for Improving the Methodology

Overall the formative research methodology worked well for testing and improving Events 5, 6 and 7 of the GSTE. This section will present several ways that the methodology may be improved for future research. Specifically, two recommendations for improving this methodology will be offered: 1) working with omission and commission and 2) reporting research findings.

Working with Omission/Commission Throughout the study, there were several occasions when the facilitators needed to omit a certain aspect of the theory (GSTE) to meet the needs of the school district. There were also several occasions when the facilitators needed to develop and include activities that were not part of the theory (GSTE). These omissions and commissions are an important part of the formative research methodology. However, the methodology did not provide sufficient guidance to help the researcher understand what to do and how to document the instances of omission/commission. The researcher found it helpful to **use rich and thick descriptions, and a rationale** for each instance of omission or commission of the theory.

Reporting Formative Research Findings The formative research methodology provided enough guidance to this researcher to design a study in

this case. However, the methodology did not provide the researcher with any guidance on how to organize the categories for presenting the results of the research. Therefore, the researcher offers the following structure for reporting the results of a formative research study (that was used in this study):

- What happened in this case, and how did it differ from the theory?

- What did and did not work well in this case?

- Recommendations (to keep what worked well and to improve what did not work well) about how this case could have been done better and about possible improvements to the GSTE, including possible situationalities.

- Summary & Conclusions

This is one method of reporting the results of a formative research study that the researcher and his advisor developed during the course of this study. During the writing of the manuscript, the researcher found it difficult to keep from repeating some of the description found in the 'What happened section' in the subsequent sections of the manuscript. Perhaps some method can be developed to refer the reader back to the appropriate part of the 'What happened' section. Perhaps combining the section on 'What happened' (description) with the section on 'What did and did not work well' (evaluation) may reduce some of the redundancy of the descriptions.

Recommendations for Practitioners

Educational stakeholders and school district change facilitators should find this line of research on the GSTE – and in particular the events studied in this

case – useful in helping to understand the process of forming a Core Team of leaders and to develop a learning organization/community. The findings of this case also can help practitioners to develop a systems view of their educational system. The researcher highly recommends that educational stakeholders and facilitators consider using the guidance offered within the three events of the GSTE studied in this case. Event 5 can help facilitators and educational stakeholders make important decisions when selecting members to serve on a Core Team. Event 5 also serves as a starting point for developing and modeling broad stakeholder ownership and involvement. Event 6 can help the Core Team and the facilitator(s) to design and implement their own retreat experience; and Event 7 can help them to develop a knowledge base in creating a learning organization/community. The GSTE provides the practitioner with a level of detail and guidance for helping them to engage in a systemic change process that this researcher has not found in other literature.

Recommendations for Future Research and Theory Development

Additional case studies should be conducted in various school districts of similar and different demographic population, size, and location. This should be followed by cross-case analysis studies for each event. For example, the findings from Event 5 in this case should be compared with the findings from Event 5 in other case studies. The comparisons among these studies will help to develop the situational aspects of the theory; that is, a particular aspect of an event may have worked well in one kind of school district and not so well in another. These

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cross-case situational aspects are important to include within the GSTE in order to develop a more robust design theory. Based on the results of the cross-case analysis, the researcher(s) could more confidently make recommendations to improve the GSTE. Lastly, additional research should continue, in order to field test and improve other Events of the GSTE.

Summary

In chapter 1, the author concluded by stating that more knowledge was needed about the *process of systemic change* in education. He set out in chapter 2 to describe the knowledge available in the literature about systemic change and analyze it using a conceptual framework of the systemic change process (see Figure 1) that he developed for that purpose. This framework served as a lens through which to review important educational change efforts and school change models. It was found that the educational change literature is severely lacking empirical studies on the process of systemic change. It was also found that, out of all the change efforts and models reviewed, the GSTE met all the criteria for a systemic change process as outlined by the researcher's conceptual framework.

Therefore, the researcher, also serving as facilitator, used the formative research methodology outlined in Chapter 3 to investigate the early stages of the systemic change process as outlined in the GSTE. Specifically, the research focused on field-testing and improving the following three Events:

- Event 5: forming a Core Team of school leaders (superintendent, PTA/O president, principal, board member, and teachers' association president),

- Event 6: developing this Core Team of leaders in a two-day retreat, and

- Event 7: building the Core Team's knowledge base in systems thinking and systems design.

It was found that Event 5 could have been improved in this case if a member of the support staff had been invited to serve on the team. Also, the need to acquire student input, without requiring that they serve on the Core Team, emerged as an important finding in this Event. Event 6 could have been improved if the GSTE had included a sample retreat agenda. The researcher could not formatively evaluate the original Event 7 since it was redesigned so significantly in this case. Instead, a process was developed by the facilitators and the Core Team that included a series of readings, group dialogues, and collective reflections, which was effective in helping the Core Team to begin to develop a learning community. Corresponding improvements were hypothesized for the GSTE.

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Event 5
Select the Starter Team

When and Why To Use this Event

Who conducts this event. The facilitator and the Superintendent.

Context.   You, the facilitator, have just analyzed the district's capacity for systemic change (Event 4) and made a final commitment to work with the district (school system and community). Now this event entails selecting the school and community leaders who will comprise the Starter Team. It will be followed by team norming processes and building knowledge of, and motivation for, systemic change.

Intent. The primary intent of this event is to decide who will be on the Starter Team. The purpose of this team is to create a climate and culture in which designing for systemic change can flourish. The Starter Team will not make design decisions; rather it will be integrally involved in the creation of the Leadership Team (which will make the decisions/recommendations about the changes) and so will have great impact on the whole change effort. It is important for you to recognize that the Starter Team is a place where the culture of design is created as a seed which then grows when the team is expanded to include a broader range of stakeholder participants.

When. We recommend that this event be done for **every** change effort. This event should not be undertaken until you have entered into a formal agreement with the district (Event 3) and found out what capacities you have to work with and which ones need to be improved (Event 4).

Synopsis. This event entails your adapting the **criteria** and selection **process** for the Starter Team to your situation with the help of the Superintendent, identifying **types of people** for the Starter Team, selecting the **initial slate** and alternatives with the help of key leaders, meeting the **individuals** to make sure they will all be appropriate, **recruiting** the members, and **announcing** the team membership to the public, all while creating a good public awareness and image of what is going on. If you are an old-timer with political "baggage," some special precautions should be heeded.

Rationale. If you skip this event, you may find the district leadership appointing team members or adopting the members of an existing team.   This can have two immediate negative effects, and one longer-range effect. First, public perception may result in some stakeholder groups being angry or dissatisfied with the selections. The community may perceive the team as "stacked" and then refuse to buy into anything proceeding from the team. This would seriously jeopardize the success of the change process. Second, the quality of the team may be hurt. Third, the quality problem would probably hurt the establishment of an appropriate culture and climate for building the Leadership Team, which could also jeopardize the success of the change process.

Implied Values. Establishment of an appropriate culture and climate for change, balance of power, inclusion of important groups, facilitator neutrality, open and honest communication with the community.

Prerequisites. Events 1-4

Calendar Time. 2-3 weeks

Goals

To choose appropriate **team members** for the Starter Team.

To establish a positive **public perception** of the change process.

Process

1. Prepare yourself.

You, the facilitator, should **review** this selection process and the criteria outlined below, and **customize** them to the needs and conditions of the district (meaning the school system and the community). *Each community is unique and may need variations on this selection process. However, these guidelines should be useful to consider as you make whatever appropriate changes to the selection process and criteria that are needed.*

(Time: 2 hours)

2. Refine the process and criteria.

Take the customized process and criteria to the **key leaders** (that is, the Leadership Team and other people who are influential in the major stakeholder groups) for any suggestions, revisions and endorsement. *It is important that you gain the support of the district leadership as to how you will make these decisions because, if they do not agree with the process or criteria you use to select members, you may find it difficult to get them to accept anything that results from this Starter Team, and their influence with their respective groups is important to the success of the change effort.*

(Time: 3 Days)

3. Work on public relations.

Inform the **public** about the formation of the Starter Team, and invite them to become involved in the effort by contacting you. An article in the local newspaper is one possible way to do this. *The policy of stakeholder inclusion and participation should be established very early in the change process. It will help to set a nonthreatening tone and will reduce future resistance to the effort.*

This step initiates a new continuous event called: Publicize the Change Effort

(Time: 1-4 hours)

4. Create a sketch of the team.

Identify the types of members for a small 5-7 person team, based on your revised criteria (Step 1 above) and identified power groups (see "Power Groups" below). While it is tempting to create a larger team, it is important that the Starter Team remain small. You may wish to consult with school leaders as you create this sketch. The sketch should not yet include names of participants, only indication of the stakeholder group with which the person should be influential, and the criteria that are most important for that person. As you create your team sketch, you should be sure to consider power issues and balance. Issues associated with balance between internal and external school participants is one of the most commonly faced. It is better to err on the side of too many external participants than the reverse. Your sketch should be approved by the board and superintendent. *The smallness of a group is related to the ability of the group to form the sort of change culture and climate that is the main function of this team. Although it may be tempting to use an already existing team that may (or may not) be larger, it is important to make this a new small team so that the design culture can be freshly established. If you do not explicitly consider issues associated with the power that various factions and representatives may wield on this team, you may face fallout from the community as well as an unhealthy team culture, rather than the generative design-oriented one that is the goal of this team.*

4.1 Discuss whether or not you will invite a student to serve on the Starter Team.

4.1a. If so, you should carefully select an influential student.

You and the members of the Starter Team should consider having several student focus group discussions with students from each (middle/high) school within the school district. During these meetings your goal will be to try to identify potential student candidates to serve on the Starter Team.

4,1bIf not, you should discuss ways of getting their input throughout the life of the Starter Team.

Hold a conversation with the key leaders and address the challenges that can emerge by including students on the Starter Team. You should also develop strategies for including student input on the Starter Team. The following questions may help to guide the discussion:

- How can the adult leaders move towards including students' perspectives in accomplishing the purposes of the Starter Team: building a culture of trust, and developing an understanding of systems thinking, systems design, and learning community/organization?
- How can the adult leaders in the school community help students to become actively engaged on the Starter Team?
- What role(s) will students serve on the Starter Team, and what types of activities will they be asked to engage in?
- At what point should students be invited to join the change process?

4.2 Discuss whether or not you will invite a contrarian to serve on the Starter Team.

Hold a conversation with the key leaders and have everyone share their rationales (pro and con) for whether a contrarian should be included on the Starter

Team. Post the responses on newsprint. You may want to consider the following rationales:

- Pro: The Starter Team will be perceived by the community as being well balanced.
- Pro: The community will feel that they are well represented.
- Pro: If a highly respected contrarian "buys in" to the process early, much resistance will be avoided.
- Pro: It will encourage broader stakeholder ownership and involvement.
- Pro: Most contrarians are vocal because they feel left out of the process. Inviting them to join in the change process, may give them an outlet to share their concerns.
- Con: It will be more difficult to help evolve a contrarian's mental model and mindset.
- Con: It will be more difficult to develop a culture of trust and consensus.
- Con: It will likely slow down the process.

4.3 Discuss whether or not you will invite a member of the support staff to serve on the Starter Team.

Hold a conversation with the key leaders, and have everyone share their rationales for whether or not it will be important to include a highly respected member of the support staff on the Starter Team.

(Time: 1 week)

5. Create an initial slate for the team.

Based on your sketch, the revised criteria, and your observations of personalities, determine an **initial slate** of potential Starter Team members and alternatives. There are two different ways to proceed here:

- If you are an external facilitator (without political "baggage") and/or the community has exhibited a high degree of trust in the school leadership, you may want to create the slate with the superintendent and take it to all key leaders for approval.
- If you are an internal facilitator and recognize that there are some difficulties with *perceptions* of your personal biases and motives (see "Potential Problems" below) and/or the community has exhibited a high degree of concern over school leadership decisions, you may want to work with the key leaders in the district (school system and community) to create the slate as a small group.

(Time: 3-6 hours)

6. Personally check out the initial slate.

You should **meet** with the individuals on the initial slate and their alternatives to make sure that all seem to meet the criteria and to establish a personal relationship with each person. Make any necessary revisions to finalize the slate and alternatives, negotiating with the key leaders as necessary.

(Time: 5-7 hours)

7. Develop a recruiting plan for each slate member.

During or after you gain approval of the final slate, or as you negotiate the initial slate with a group of key leaders, you should also take a moment to identify effective **recruiting strategies**. *Each person is likely to be motivated by different things and the most effective manner or person to contact them may not be you or the superintendent.* It is a good idea to brainstorm the answer to this question, "How do we get John to commit to this team?" as you create the list. This also helps to identify those potential candidates who may not be willing to commit, because some of the key leaders may be able to tell you that it is just impossible to get a strong commitment from that person. A plan for recruiting should be developed at the time of final slating.

(Time: 1-2 hours)

8. Recruit the Starter Team members.

If a number of people were chosen as recruiters, it is very important that a consistent message is communicated across recruiters to all new Starter Team members. *The absence of clear communication from recruiters can result in confusion over the team's purpose, function, and role, and thus confusion in the community at large as these expectations are shared through the grapevine.* In addition, the strong commitment that is necessary for such a team should be clearly explained by all recruiters. *It is important that members are strongly committed since there are relatively few, and a lot of energy will have to come from them in the upcoming work prior to expanding this Starter Team.* Therefore, it is a good idea to express to members that if they are not willing to commit a substantial amount of their time, they should decline participation at this point so that you may seek an alternate member.

(Time: 2-5 days)

9. Reformulate the slate, if necessary.

Once those on the final slate have committed or declined, you may find that there are still some open slots despite your attempt to deal with this by choosing some alternatives. You may need to reformulate the slate based on the acceptance of some of your initially slated members. If so, make a second slate based on the open slots and acceptances, and gain approval of this second slate. Again, you may choose to do this individually or as a small group. Finally, recruit these potential members to commit.

(Time: 0-3 days)

10. Publicize the change effort and the formation of the team.

Finally, you should share information regarding the change effort and the team membership list with the **public**. Alternatives here include press releases, school newsletter announcements, school letters home to all parents, church bulletin announcements, or a celebrative reception for the members, to which the public is invited. This event would be an opportunity to share the good news that change has begun in the community, to inform the community as to who is on the Starter Team, to provide an opportunity for everyone to meet the members, and to emphasize the importance of their (the community members') involvement in the change effort. *Making these early connections with the community allows the team to begin to build the sorts of relationships that will become important as change progresses. Also this is an*

opportunity to celebrate, which is very important in building a strong culture among participants.

This step initiates a new continuous event called: Publicize the Change Effort.

(Time: 3-6 hours)

Potential Problems with the Process

The following are some problems you may anticipate while conducting this process:

- The team that you create is a clear message to the broader community. It is important that you not create a team that conveys the wrong types of messages and relationships, such as the perception of a "stacked" team or a team that is not open to input from others.

- As the facilitator it is important to recognize that if you are an external facilitator, you may be the most unbiased selector of the Starter Team, however your understanding of the context may still be weak. You should try to get as much information about the stakeholder groups as possible. If, on the other hand, you are an internal facilitator, you must be aware that you may not be perceived as terribly neutral in the matter of team membership. Although you understand the context very clearly, you bring your own political values and biases with you into the process of selection, and this can create negative perceptions.

- Your initial tendency may be to make the team larger to include all possible stakeholder groups, reticent factions and opinion leaders. However, it is important to remember that less may be better here than more. Too many members of the Starter Team can make meetings difficult to arrange; and, although the tradition in the school may point to low attendance at such meetings in the past, firmly committed members should all attend every meeting so that re-work is minimized at each meeting. Try to limit your group size to between 5 and 7 members and resist the temptation to grow beyond these limits. Another common tendency here is to allow an already existing team, which is concerned with broad school issues, to serve in the capacity of the Starter Team. This is not a good idea because it is important for the group to establish an entirely new identity of its own and a very different working culture. This cannot be accomplished using a group that has already established identities and morés.

- The quality of the team may not end up being as high as you need for the change effort to be successful. This may be due to caving in to political pressures in the selection process, or to not including the most important criteria, or to not gathering enough information about the individuals to be able to apply the criteria accurately, or to a host of other reasons. But the consequence is not being able to build and transfer an appropriate culture and climate for change to the expanded Leadership Team. It is essential that the people you pick are well respected and influential within their respective stakeholder groups, if not more broadly, and that they have mindsets and personalities that are conducive to forming the appropriate culture and climate for systemic change.

Criteria

There are many criteria for membership in the Starter Team. However, two of the most important are:

A. Starter Team members should be either formal or tacit leaders in the community or district. *Gaining participation from leaders in this Starter Team may be difficult because they are typically very busy, but the investment will pay off if they are able to make the commitment because they will lend a high degree of credibility to your efforts.*

B. Starter Team members should be change advocates. They should exemplify change in their own lives as well as in what they say. They should be models of learning— by outward action the community should know that they are open to change because they are constantly re-creating themselves. *This is important because we recognize that change begins first within each individual, and the team must be able to recognize that in their own lives. In addition, if they are going to suggest changes to others, they must be models of change themselves so that they are beyond reproach during difficult decision making about the changes.*

Additional criteria that you may want to consider include:

C. Willingness to negotiate their lives and commit the necessary time. *This is very important because when team meetings are missed, the culture changes and much has to be re-accomplished when the absentee re-enters the process.*
D. High level of credibility and respect within the stakeholder group (related to opinion leader)
E. Persuasive and/or cooperative personality
F. High level of dissatisfaction with current system (related to change advocate)
G. Public/school relations abilities
H. Balance of representation across stakeholder groups
I. Balance of representation across gender, race, class, age and role
J. Consensus-oriented
K. Process oriented
L. Open-minded
M. Compatible personality with other group members
N. Honest, self-disclosive and self-critical.

Power Groups

Some types of people have usually been found to be important to include in the Starter Team. In some cases, it may not be wise to include all these people, but in most cases it is appropriate.

Superintendent: This is a good choice if s/he is a strong change advocate and a positively viewed influence in the community.

The "right" Board of Education member: Since any changes will have to be approved by the board, it is important to find an open-minded, change-oriented board member who is sufficiently respected by other board members to be able to influence their thinking.

Teacher of the year: Or some other highly respected teacher voice should be on the team. This may or may not be a union representative. It should be an open-minded, change-oriented teacher who is sufficiently respected by other teachers to be able to influence their thinking.

Parent: The parent voice is perhaps the most oft overlooked resource. This may or may not be someone from the PTA/PTO or other strong parent group, but it should be an open-minded, change-oriented parent who is sufficiently respected by other parents to be able to influence their thinking. Such a parent voice has the potential to become a great support for change in the district, for parents are highly motivated stakeholders who can generate the energy necessary to carry the team through difficult times. They can also take the wind out of the sails of a vocal minority.

Business owner, social service agent, or senior citizen: You should identify the most influential groups in the community, and include open-minded, change-oriented people who are sufficiently respected by those groups to be able to influence their thinking. These community members bring new and different perspectives on education to the process, and they are important for stakeholder and community acceptance over the long run. Furthermore, people who know how to get things done in the community can be invaluable.

Resistant faction(s): If you have a group that is particularly concerned or historically negative toward educational change, it is wise to find a representative of it who is open-minded and sufficiently respected by the group to be able to influence their thinking.

Understandings

Given the difficult task of selecting members for the Starter Team, we offer the following suggestions for specific understandings you may find helpful to cultivate. Again, please do not feel you have to use these understandings, and we hope you will identify other understandings you think are important. We encourage you to carefully consider *why* you are accepting, rejecting, modifying, or adding each understanding.

A. Selection criteria

What criteria should selection be based on?
What makes a good, powerful group member?

B. Stakeholder groups

What groups are most important to be represented on the Starter Team?

C. Recruiting

What motivates busy people to be involved?
How can we build an optimal Starter Team?

D. Balance

What is an appropriate balance among stakeholder groups, working styles, roles, classes, genders?

What would balance look like on our team?

Activity 6.2
Designing the Retreat

When and Why To Use this Action

Who conducts this activity. The facilitator and the Starter Team.

Intent. The primary intent of this activity is to design a process (Retreat) for capacitating the Starter Team and establishing a design culture for change.

Context. In this activity, you, (the facilitator) will lead the selected persons in designing their capacitating process in the form of a Retreat. Conducting the retreat (Activity 6.3) and then reflecting on that experience (Activity 6.4) will follow this.

Synopsis. This activity entails the Starter Team members and facilitator designing a Retreat experience to norm the team and build the team members' knowledge with respect to systemic change. The design will incorporate various assessment data (from Event 4) and the outline presented in this activity as the basis for a capacitating process for the Starter Team. This process will focus on developing trust, team dynamics, and a change culture. This process is oriented around a two-day retreat to be conducted off-site from the local school district.

Rationale. If you skip this activity altogether, and elect not to re-design the capacitating process laid in out in Activity 6.3, the Retreat will be less likely to attain its goals, because it may not be specific to the needs of the persons forming the Starter Team.

Implied Values. ESD, systemic thinking, design conversation, group dynamics, reflection, context, trust, and culture.

Prerequisites. Activities 6.1.

Calendar Time. 7-10 days.

Interlinkages. Continuous Event A: Engage in reflection; Continuous Event B: Build and Maintain Motivation; Continuous Event C: Build and Maintain trust; Continuous Event M: Develop Group-process and Team-building Skills; Continuous Event N: Build Team Spirit.

Goals

To design a capacitating process for the Starter Team.
To establish a culture of design for change within the Starter Team.

Process

The Facilitator should become as familiar as possible with the 5-7 persons selected (their background, relationship to the district, initial strengths they bring to the design team, etc.). The Facilitator and Starter Team members should review and re-design this whole process (Activity 6.3 and Activity 6.4) before they engage in it. All participants should review and discuss the Values Glossary for the description of implied values related to Event 6. Also, having the whole process in mind is important, because each activity is critically linked to the other and provides a context for creating and sustaining the group dynamic, change culture, and energy for the change process.

1. Determine time frame for the Retreat (capacitating process). (For Goals 1 & 2)

The Facilitator and Starter Team should identify a block of time when they are available for conducting/participating in the Retreat (capacitating process). It is recommended that the Retreat take place shortly after the Starter Team is formed, thus ensuring that the work to build a skill and knowledge base is initiated, as well as beginning the development of a group dynamic and sense of community. Examine what the constraints are for each member, and then establish a time frame for conducting the Retreat (Activity 6.3) and debriefing the experience of the Retreat (Activity 6.4). You (the Facilitator) should mediate the process for determining dates for conducting the Retreat, helping the Starter Team to understand the importance of conducting the Retreat at an early point in the Team's experience.

In the case where the time frame must be extended, or the Team cannot meet for several weeks/months after the initial forming, then you (the Facilitator) will need to determine, in concert with the Starter Team, what the purpose of the Retreat is in relation to when it is conducted. If the retreat is delayed for a month or less, then the interim should perhaps be used solely for designing the retreat experience. Currently Event 6 of the GSTE recommends 7 - 10 days for designing the retreat experience. If the delay time will be more than one month, then it will most likely be important for the facilitator and the Starter Team to not only design the retreat, but also continue with the change process (e.g., develop ground rules for working together as a team, develop an agreement for the change process, meet with the school board to review and endorse that agreement, and develop their knowledge base in systems thinking) to sustain the motivation of the Starter Team members.

(Time: 15-30 minutes)

2. Prepare for designing the Retreat (capacitating process). (For Goals 1 & 2)

The facilitator should think about the purpose of the retreat (capacitating process) and how it relates to the larger systemic change effort (include a review of Activity 6.3). Think about how the retreat experience will inform similar capacitating processes for subsequent teams later (Events 13 & 14). In the case where it is necessary to delay conducting the Retreat, you (the Facilitator) will need to examine, with the Starter Team in Step 5.5, alternative purposes for the Retreat. (An alternative purpose might include self-critical assessment on the part of the Team, if the Team has been functioning for several weeks/months prior to conducting the Retreat.) While it is advised that the Retreat take place early, if it occurs later, the designing of the Retreat will follow a similar decision path.

This would be a good time to review readings and materials related to group dynamics, experiential and outdoor learning, team building, and trust building,. You (the Facilitator) should select relevant articles or chapters for the team members to review to prepare for designing the capacitating process. Following are some suggestions for reading in preparation for the design process:

Some Readings on Group Dynamics, Outdoor and Experiential Learning, Team Building, and Trust Building

Group Dynamics:
Forsyth, D.R. (1990). *Group dynamics* (2nd Ed.). Pacific Grove, CA: Brooks/Cole Publishing Co.
Manning, g., Curtis, K., & McMillen, S. (1996). *Building community: The human side of work*. Cincinnati, OH: Thomson Executive Press.

Outdoor & Experiential Learning:
Kolb, D.A. (1984). *Experiential learning; Experience as the source of learning and development*. Englewood Cliffs, N.J.: Prentice-Hall, Inc.
Kohnke, K. (1989). *Cowtails and cobras #2*. Kendall Hunt Publisher.
Kohnke, K. (1984). *Silver Bullets.* Kendall Hunt Publisher.
Orlick, T. (1978). *The cooperative sports & games book.* New York: Pantheon Publishing.

Team Building:
Friend, M., & Cook, L. (1992). *Interactions: Collaboration skills for school professionals.* New York: Longman Publishing Group.
Varney, G.H. (1989). *Building productive teams: An action guide and resource book.* San Francisco: Jossey-Bass.

Trust Building:
Bryk, A. S., & Schneider, B (2003). Trust in Schools: A Starter Resource for School Reform. *Educational Leadership*, 60(6), 40-44.
Shipengrover, J.A. (1996). If It Doesn't Embrace Chaos, Can It Be Called a Strategic Plan? *CUPA Journal*, 47(1), 1-6.

(Time: 8 hours)

3. Review relevant data as preparation for the design process. (Goals 1 & 2)

It is important for you (the Facilitator and Starter Team) to review assessment data collected up to this point (Event 4), and identify any previous experiences in team building or capacitating processes that are a part of the District's change culture/history. Isolate positive or successful experiences that district personnel have identified, and determine whether or not they offer any insight in terms of designing the capacitating process of the Starter Team.

(Time: 2-4 hours)

4. Review and refine the re-design process for the Retreat. (Goals 1 & 2)

Prior to re-designing the Retreat (capacitating process), it is important for you (the Facilitator and Starter Team) to review and refine the re-design process (Step 5 below). Since the Starter Team does not have formal experience in systems design, it will be important for the Facilitator to provide guidance in refining the re-design process.

The facilitator and Starter Team should review Activities 6.3 (Conduct the Retreat) and 6.4 (Reflect on the Retreat) prior to refining the re-designing the process shown in Step 5 below. It is important that everyone understand that designing the Retreat includes how it will be conducted as well as the post-Retreat debriefing. There is much to think about when re-designing the capacitating process, including various issues to be considered and process steps to be taken. The following table of considerations may prove useful in refining the re-design process.

Considerations for Refining the Re-design Process

Example Guidelines:

Determine how much latitude there is for re-designing the Retreat.
Determine what amount of time is realistic for all team members to engage in a re-design process.
Determine what timelines are necessary for carrying out each part of step 5.
Determine what types of data should be considered in the re-design process.
Determine what types of data should be collected during the Retreat process (inventories, instrumentation, etc. for self-examination; group dynamics data; etc.).
Establish what the role of facilitator and Starter Team members is in re-designing the Retreat?
Establish what the role of an outside facilitator is if they are to be involved in the re-design process.
Establish ground rules important for all team members in the re-design process.
Determine how you (the Facilitator and Starter Team) create a safe context for engaging in conversations oriented toward constructing meaning and understanding.
Establish the appropriate methods for recording or documenting the re-design process (you may elect to use reflective journaling, audio or video recording, observational notes, etc.).

Example Process Steps for Refining the Re-design Process:

Review and revise the design considerations (below),.
Establish a list of dates/times for design meetings (at least four or more meeting times should be set).
Determine what a design conversation is, including definition, characteristics and how it functions.
Decide what data to use in the re-design process.
Review related readings on ESD, systemic thinking, group dynamics, outdoor and experiential learning, team building, trust, and change relationships.
Facilitate the refinement process.
Record or document the refinement process for later use in debriefing the experience.
Continue meeting until the Starter Team feels comfortable with the refinement of the design process.
Reflect on the refined re-design process and critically evaluate if it will accomplish its purposes.

At this time everyone should reflect on the example guidelines and steps, and then ask relevant questions about the refinement process. Addressing these questions now will contribute to a safer and more viable space for refining the re-design process, and will contribute to awareness of concerns or existing assumptions about the process. The

re-design process should be revised and adopted by the Facilitator and Starter Team at this time.

(Time: 4-8 hours)

5. Design the retreat (capacitating experience). (Goals 1 & 2)

It is important for the Facilitator and Starter Team to understand that the guidance provided in this step and Activities 6.3 & 6.4, are intended to be re-designed to fit the needs of the Starter Team members as well as become more contextually sensitive to the district/community in which the members work and live. Since the Starter Team has no formal experience in design or re-designing an activity or larger system, the Facilitator should view this as an opportunity to assist the Starter Team in learning about design and building a sense of ownership and responsibility, as well as developing a design culture in the Starter Team.

Following is a list of design considerations for the Retreat that will contribute to a successful design.

Design Considerations for the Retreat

What amount of time (1-3 days) will be appropriate for the Retreat (capacitating process)?

Does the design (agenda) consider pre-Retreat time for resting and preparing for the capacitating process, and post-Retreat time for resting and returning to professional responsibilities?

What should be the breadth and depth of the capacitating process? (A packed agenda takes away from building the group dynamics. Fewer agenda items allow more time for deep processing and establishing strong group dynamics.)

What retreat or professional development setting is available that provides both indoor facilities (overnight accommodations) and outdoor experiential learning opportunities (ropes course, climbing wall, etc.)?

What physical, psychological, etc. constraints, if any, do you (the Facilitator and Starter Team) have which pose design issues to be considered?

What types of team building and group dynamics activities can be supported by the retreat facility?

How will various types of assessment inventories or instruments (learning styles inventory, personality inventory, trust inventory, etc.) be used in the capacitating process?

How much time and opportunity for reflection, dialogue, and processing of the experiences will be allowed. (Providing protected time for personal reflection is important to processing individual experiences.)

Will there be an outside facilitator for the Retreat (the Facilitator and Starter Team should focus on becoming a team)? Who will serve as outside facilitator and does the person have the required skills?

Will the outside facilitator be a formal part of the design process for creating the Retreat experience?

How does the Retreat design (agenda) address the potential of outside biases from the external facilitator or setting selected for the Retreat?

> What preparation does an outside facilitator need before working with you (the design/change Facilitator and Starter Team) in the capacitating process?

5.1 The Facilitator should assist the Starter Team in deciding if an outside facilitator will be used for the Retreat, and if so, then that person should be selected and brought into the process of designing the Retreat.

**Some Suggestions to Consider When Deciding on
Whether or Not to Hire an Outside Facilitator**

- If there are two facilitators available who are also members of the Starter Team, and there is detailed guidance from the GSTE, then perhaps an outside retreat facilitator is not needed.
- If only one facilitator is on the Starter Team, then it is suggested that the Starter Team hire an outside facilitator to help conduct the retreat, even if there is detailed guidance from the GSTE.
- If the facilitator has experience conducting these types of retreats, then perhaps an outside facilitator is not needed.
- In order for the Starter Team facilitator to develop a relationship as a member of the Starter Team, it is recommended that the facilitator and Starter Team hire an outside facilitator to conduct the retreat.
- It is recommended that the Starter Team plan on having a backup facilitator ready in case the main facilitator has to cancel.

5.2 The Starter Team should reach consensus on the purpose of the Retreat and should establish goals for the Retreat.

5.3 The Starter Team should review the Values Glossary provided in Unit I and adopt from them those values most important to the capacitating experience. It is appropriate to delete, add to, and revise these values.

5.4 The Facilitator should engage the Starter Team (and outside facilitator for the Retreat, if any) in a dialogue about how they envision the Retreat in terms of (a) the overall process for building group dynamics and trust, (b) how they will learn together, (c) how they will explore and make sense out of their common experience, and (d) what reflection activities they may want to incorporate throughout the retreat (e.g., journaling experiences, sharing personal thoughts from the journal, and collective reflections on readings about building trust, team building, systems thinking, and group dynamics).

5.5 Review the time frame established for the Retreat in Step 1 above, and finalize its duration (1-3 days) and date, when the post-Retreat debriefing will be, the number of design meetings required to complete the re-design process, and alternative dates if advisable. In determining the duration, keep in mind that the amount of time

allocated to the capacitating process contributes directly to the strength and potential of the Retreat. The duration determines in large part how many experiences may be incorporated in the Retreat and the opportunity for reflection and connecting as a Team.

Suggested Durations for Retreat Experience

<u>Two-day duration</u> with overnight at Retreat facility. Retreat facility should provide sleeping/ eating accommodations for team members and indoor/outdoor experiential opportunities like ropes courses, climbing walls, role-play, self-assessment, group dynamics and team building, etc.

<u>One & one-half day duration</u> with overnight at Retreat facility. Retreat facility should provide sleeping/eating accommodations for team members and indoor/outdoor experiential opportunities like ropes courses, climbing walls, role-play, self-assessment, group dynamics and team building, etc.

5.6 Review the, two sample Retreat agendas (below) and decide if you want to revise either or start from scratch. If you choose to revise one, adjust the major activities and time blocks, keeping in mind your goals (5.2), values (5.3), vision (5.4), and duration (5.5). If you choose to start from scratch, lay out the major activities and time blocks, keeping in mind those same issues.

Sample General Retreat Agenda

• <u>Morning of first day</u>:

  - Travel to Retreat site together as a Starter Team (while optional this experience begins the bonding of the team and establishes the importance of sense of community versus individualism)

  - Engage in reflecting and identifying concerns or discomforts each person feels (helps to identify the social and psychological context for the capacitating process)

  - Engage in Trust-building activity (rope activity or other—requires facilitation to make connections to systems thinking, group dynamics, team learning, etc.)

• <u>Afternoon of first day</u>:

  - Participate in self-assessment using Personality style inventory (or other) (requires facilitation by person grounded in use of the adopted instrument)

  - Examine how personalities contribute to group dynamics and functioning as team (helps individuals to understand the contribution that diversity brings to the team and an awareness of how the many personalities of different stakeholders contribute to the complexity of the systemic change process).

  - Formal reflection time apart from each other (20-30 minutes for journaling—important to preserve reflection time for examining and integrating experiences into personal mindsets)

  - Experiential activity (outdoors if possible) for team building (important to breaking down boundaries and engaging in risk taking)

- Self-disclosure process attempting to examine experiences of the activity (requires facilitation to provide safe space for sharing more personal parts of individual identities and feelings about process/experiences)

- **Evening of first day**:

    - Evening meal together (optional: Starter Team prepares meal together versus having it catered)

    - Watch MindWalk movie and engage in reflection and dialogue (stimulates systems thinking creates dialogue context for making relationships of second-day experience and systems)

- **Morning-afternoon of second day**:

    - Participate in a ropes course, climbing walls, etc. or other formalized outdoor experience that provides opportunity for establishing group dynamics and team-ness (major contributor to creating group dynamics and establishing a common experiential context from which the collective identity of the team emerges and can be built upon over time)

    - Reflection and dialogue about the experience (important to allow time for examining participants perceptions related to the Retreat and for bringing closure to the formal Retreat experience, and establishing process linkage to formal debriefing time)

Additional Sample Retreat Agenda

Day 1

Time	Activity
10:00 – 10:30	Introductions and orientation for the retreat: Ice-breaker activity, review of agenda
10:30 – 10:45	The Starter Team: Who are we? Roles and responsibilities of each of us, strengths and weaknesses of the team
10:45 – 11:00	Ground rules Establish ground rules for meetings and other interactions and behaviors
11:00 – 11:45	Trust building Rope activity and debrief
11:45 – 12:30	Collaboration Dialogue on what, why, who, how, problems, benefits, dialogue
12:30 – 1:30	Lunch together
1:30 – 2:30	Understanding the overall change process Dialogue on the article on the GSTE
2:30 – 3:00	Collective reflection Big Question Activity
3:00 – 3:30	Break and reflection time
3:30 – 4:30	Constructive criticism Role play activity and debrief/discussion
4:30 – 5:30	Managing conflict Dialogue on negative and positive conflict
6:00 – 7:30	Dinner together
7:30 – 9:30	Passionate conversation: Watch MindWalk video

Day 2

Time	Activity
8:00 – 9:00	Breakfast together
9:00 – 9:30	Reflections on Day 1
9:30 – 10:00	Making connections

	Dialogue on the MindWalk video
10:00 – 10:30	Break
10:30 – 11:30	Building consensus
	Dialogue on what, how, why, who, when
11:30 – 12:00	Values of the change process
	Review the GSTE's values and revise for our change effort
12:00 – 1:00	Lunch together
1:00 – 2:30	Values of the change process. Continue to review the GSTE's values and revise for our change effort
2:30 – 3:00	Reflection on the retreat and next steps
	Reflect individually on major take-aways, share with group, discuss next steps

5.7 Work out the details for each major activity and time block in the agenda, adjusting the order and length of each as necessary.

5.8 Identify what support is needed for each activity, including the active facilitation needed.

5.9 Review how the first day integrates and relates to the second day of experience, and vice versa (how does an experience of ropes courses or other outdoor experiential learning activity connect to the process of building trust, self-assessment, reflection, building group dynamics, etc.).

5.10 Design the post-Retreat reflection experience.

(Time: 2-5 days)

6. **Establish a time to prepare for debriefing the Retreat.** (For Goals 2)

The Facilitator and Starter Team should determine a time for reflecting on their Retreat experience, and this should be done prior to engaging in the Retreat. By establishing a time for reflection and debriefing their experiences, the Starter team members will see the flow and continuity in the process and make connections to the continuing nature of the change process. Also, team members often find it more difficult to focus on setting a meeting time at the end of the Retreat and may want to postpone this until a later time. It is important that a schedule be set prior.

(Time: 15 minutes)

Potential Problems with the Process

The following are some of the problems you may anticipate in trying to conduct this process:

• There may be confusion on the part of the Starter Team as the larger role that the Retreat and its re-design take in the systemic change process, and therefore they may resist the process. It is important that the Facilitator explore the purpose of the

Retreat with the Starter Team and how it contributes to working with other teams later in the change process.

- Individuals may find it easier to adopt the suggested Retreat format rather than engaging in re-design. Opting for the example we have provided removes the Starter Team from designing their own Retreat and reduces the opportunity for ownership of the capacitating process. This also endangers the success of a retreat when it doesn't consider the unique character of the Facilitator and Starter Team as well as the context in which they will function.

- Individuals may find the idea of ropes courses or other outdoors experiential learning frightening and uncomfortable. Likewise, the idea of participating in various self-assessment inventories may threaten them and add anxiety or tensions to the design process. It is important that everyone understands the importance of each activity or experience to creating a process for building trust and strong group dynamics.

- Individuals may not understand the complexity of re-designing the Retreat, and the need to consider every dimension of the capacitating process. It is important that specific attention be given to every level of systems design, and that all design considerations provided in the activity be reviewed.

- Selecting a co-facilitator to assist with the Retreat may be viewed by the facilitator as unnecessary. Facilitators may view their position or role as threatened by an outside person and attempt to direct the Starter Team away from this decision. Since the capacitating process (Retreat) is for both the Facilitator and Starter Team, it is important to consider the role a co-facilitator plays in enabling all individuals to be active participants in the Retreat.

- Individuals may opt for reducing the amount of time allotted to a Retreat below that provided in the suggested configurations. The amount of time provided in the design for a capacitating process relates directly to the quality and success of the Retreat. The optimum is the two-day configuration, while the one and one-half day configuration is minimum. The overnight experience is a critical element of the overall capacitating process and provides a context in which everyone is somewhat vulnerable and at risk, each of which is important to creating a group dynamic and team-ness.

- Some individual Starter Team members may elect to not participate in the re-design process for creating the Retreat. When possible, times should be rescheduled to provide opportunity for all members to be a part of the re-design process. Problems may arise later when the Starter Team engages in the Retreat and an individual finds her/himself in an activity or experience that is less than comfortable.

Understandings

Given the importance of helping the people you are working with to understand the need for, and nature of, systemic change, we offer the following suggestions for specific understandings you may wish to work on. Again, please do not feel you have to use these understandings, and we hope you will identify other understandings you think are important. We encourage you to carefully consider *why* you are accepting, rejecting, or adding each understanding.

> To design a capacitating process for the Starter Team.
> To establish a culture of design for change within the Starter Team.

For Goal One.
What is involved in a design process?
What is a capacitating process?
Why is a capacitating process important to the Starter Team?
What change relationships were there established through the re-designing process?
What role did facilitation play in the design process?

For Goal Two.
What is the relationship of a culture of design to the Starter Team? … to the systemic change process?
What is required to establish a culture of design? … of change?
How does re-designing the capacitating process contribute to a culture of design? … of change?

For The Entire Activity.
How did the participation of the Starter team members in the design of the Retreat contribute to the "goodness-of-fit" of the design?

Event 7
Build Starter Team's Knowledge Base in Organizational Learning

When and Why To Use this Action

Who conducts this event. The facilitator and the Starter Team.

Intent. The primary intent of this event is to begin to build the knowledge base and capacity of the Starter Team to engage in systemic change by facilitating their learning about the basics of systems theory, change process and educational systems design, and developing a learning community.

When. We recommend that this event be done for every change effort, regardless of whether you are an internal or external facilitator. This event should not be undertaken until you have completed Event 6--particularly the Starter Team retreat.

Context.   In this event, you will begin to help the Starter Team come to a better understanding of the underlying philosophy and theories which will guide their work. The Starter Team has just returned from its retreat where they began to build their knowledge about systemic change. Now this event helps the Starter Team to come to a fuller more confident understanding of systems, change and design. Most importantly this event will help the Starter Team begin to learn how to learn together. This event will be followed by Event 8 which is the re-design of Events 9-11.

Synopsis. This event entails engaging the Starter Team in directed readings, individual and group reflections on developing a learning community. You should help the Starter Team to develop a skill and knowledge base for organizational learning. Pay particular attention to systems thinking, personal mastery, shared vision, team learning and mental models. The Starter Team will experience conversation as a medium for exploring mindsets through the use of dialogue, reflection, and disclosure.

Rationale. If you skip this action, you should expect that the Starter Team members would maintain a narrow problem-centered focus in which the change process is seen as problem solving, and not a learning process. In addition, team members would likely feel incompetent, ill-prepared, and anxious about engaging in the process of redesigning Events 9-11. The most obvious symptom of this would be the ready acceptance of our guidelines without critical redesign. While this may seem to be an easy answer, it is imperative that the Starter Team prepare itself to engage in true educational systems design, because relying too heavily on guidelines presented in this book is not contextually sensitive and ultimately will not match the needs of the district. In addition, because design is an activity engaged in throughout this process, this activity is an important foundational experience which will pay off over months and years.

Implied Values. Learning community/organization, systemic thinking, stakeholder designership, process orientation, wholeness, and language, reflection, disclosure, dialogue.

Prerequisites. Event 6 and completed Starter Team retreat.
Calendar Time. 8-12 weeks

Goals

To explore the notion of a learning community/organization.
To develop Starter Team members' knowledge base and capacity in developing a
learning community/organization.
To explore the relationship between learning communities/organizations and systemic
change.
To continue to evolve the group dynamics developed during the Starter Team retreat.
To build upon the change culture established during the Starter Team retreat.
To develop skills and knowledge in conversation and reflection as it relates to change.

Process

1. Develop a Reading Plan: Distribute to the Starter Team members a list of
recommended readings for developing a learning community/organization, guidelines for
reflection, and guidelines for meaningful conversations. Discuss the importance of
sincere engagement in the learning process and openness to new ideas. During the
meeting ask the Starter Team members to begin to skim through each of the books, so
that they may gain a sense for which readings they would like to select, and the order
they would like to read them. They should also assess how much time they have per
week to devote to the readings. Refer to the sample reading plan below as a starting
point for your discussion.

Recommended Reading List for Developing a Learning Community/Organization

DuFour, R., & Eaker, R. E. (1998). *Professional learning communities at work: Best
practices for enhancing student achievement.* Alexandria, Va.: National
Education Service; ASCD.
Senge, P. M. (1990). *The fifth discipline: The art and practice of the learning
organization* (1st ed.). New York: Doubleday.
Senge, P. M. (2000). *Schools that learn: A fifth discipline fieldbook for educators,
parents, and everyone who cares about education* (1st ed.). New York:
Doubleday.

Reading Plan for Schools that Learn

Ch 2 pp. 59 - 92: A Primer on the Five Disciplines

Ch 7: Systems Thinking

Ch 12: Leadership, pp. 432 - 438: A School Board that Learns

(Time: 1-2 weeks)

2. Ask the Starter Team to keep a reflective journal in which they record their self-inquiry and personal reflections on systems thinking, learning community, and the concepts they are exploring. The reflective journal will enable the Team to process their readings and the meaning and understanding they are each developing related to systems. These journals should be brought to the next meeting when you assist the Team in sharing their work. Encourage participants to reflect on a daily basis on the readings they are doing.

Guidelines for Reflective Practice

- Embrace reflective practice as an ongoing process related to systemic change.
- Examine the types of reflective practice and the purpose of each, i.e. self-reflection, collective reflection, reflective journaling, reflection-on-action versus reflection-in-action, etc.
- Determine the type of reflective practice best suited to the event, activity or process engaged in by participants of the change effort.
- Honor and respect each person's reflections as extensions of their personal space and thought.
- Disclosure of reflective thought is a personal option and must be respected.
- Collective reflection--dialogue--is a process of sharing individual thought that requires a safe space for processing.
- Determine what the topic of reflective practice is, and whether it is individual or collective.
- Decide on a method(s) for the reflective practice (journal, video scripting, dialogue group, computer, etc.).
- Provide grounding in a knowledge base on reflective practice and methods.
- Establish a set of heuristic questions which will guide the reflective process (either as an individual or collective).
- Examine underlying assumptions, beliefs, and values associated with actions creating the context for reflective practice.
- Develop a process for analyzing and synthesizing reflective thought and how to use it in guiding participants' own practice.
- Decide how the reflective process will be examined and modified as a participant becomes skilled and knowledgeable.
- Develop a set of guidelines on how to use reflective practice to guide systemic change and systems design.
- Examine uses of media for reflective practice (i.e., reflective journals, collective reflection, video scripting, e-mail, electronic conversations, distancing and immersion, etc.) in systemic change and systems design.
- Define how reflective practice may be used as feedback and feedforward.
- Record reflective thought and continue the reflection process(es).
- Define and put into place applications of findings individually and collectively; always share findings with others.

(Time: 1 hour)

3a. Group Reflection: Hold at least one meeting to begin to help the Starter Team explore their understandings of the readings and their reflections. Encourage all participants to share their ideas in an open conversation. It may also be wise to encourage the members to express any concerns they may have about something happening in their school district that can have an effect on the change process. You may be able to recommend readings that address these concerns. Your focus here should be on helping participants to begin to share their feelings toward the initial readings outlined in the recommended reading list. You should also ask the Starter Team members how comfortable they feel with the reading level. Based on their reactions to the reading level of the articles and books, you may need to make adjustments to the reading plan.

 (Time: 2-4 hours)

3b. Engage the Starter Team in conversations where assumptions are disclosed and judgments of those assumptions are set aside. You, as the facilitator, should also participate in this process, and it is important to remember that you are a member of the team and should find a balance between your facilitator role and your team member role.

Guidelines for Meaningful Conversations

- Recognize a conversation as an ongoing sustained process, governed by jointly established rules.
- Examine the purpose for conversation and determine whether dialogue, design, debriefing, discussion, inquiry, etc. is the most appropriate.
- Agree on whether there is an agenda or topic for the conversation, or if it is undefined and generative.
- Decide jointly on the method(s) used.
- Examine and agree on the role of a conversation facilitator.
- Select a suitable setting--conducive to the conversation purpose--which is safe for all participants.
- Ensure equity in participation and accept all contributions without criticism.
- Seek and respect diversity and promote multiple perspectives.
- Aim at defining common ground.
- Focus on creating shared meaning and understanding on each participant's contributions.
- Prepare well for the conversation, ground it in a rich knowledge base that participants bring to the event, and have knowledge resources at hand.
- Determine how the conversation will be documented for later use.
- Report findings and continue the conversation by networking, e-mail, and electronic conversations.
- Define and put into place applications of findings individually and collectively; always share findings with others.

Recommended Readings on Conversation

Banathy, B.H. (1996). Designing social systems in a changing world: A journey toward a creating society. New York: Plenum Press, (pp. 195-204).

Bohm, D. (1990). *On dialogue.* Ojai, CA: David Bohm Seminars.

Issacs, W. N. (1996). The process and potential of dialogue in social change. *Educational Technology*, *36*(1), 20-30.

Jenlink, P.M., & Carr, A.A. (1996). Conversation as a medium for change in education. *Educational Technology*, *36*(1), 31-38.

(Time: ongoing)

4. Finalize the reading plan that you began to develop in step 1. For school practitioners and community members it is recommended that you use Peter Senge's *Schools that Learn* as the primary source. (It is listed in the recommended reading list for organizational learning.) You should let the Starter Team decide whether they want to use Senge's book, *The Fifth Discipline*, since it has been described as being better suited for business people, graduate students, and academics. Once you and the Starter Team have decided on which book and articles you will use, you should then review the concepts with the Team and assist them in constructing some common understanding as well as in beginning to construct a common language.

(Time: 1 week)

4.1 Develop guiding questions for each of the readings/concepts. These questions will help to focus the readings and guide the group conversations. The table below provides an example of guiding questions you might review for each of the learning organization concepts found in Senge's *Schools that Learn*.

(Time: 1 week)

4.2 Use various instructional strategies to help the Starter Team members to understand Senge's five disciplines (e.g., dialogue, group reflections, visuals, metaphors, guiding questions and simulations).

Guiding Questions for Senge's Five Disciplines of Organizational Learning

Senge, *Schools that Learn*: **Chapter 2: Guiding Questions**

1. Personal Mastery

What are the two major aspects of personal mastery? (p. 59)
Why is it important that they create a state of tension? (p. 59)
Why is solo reflection the only way to develop personal mastery? (p. 59)
Why is the development of personal mastery a life-long process? (p. 59 -60)

2. Mental Models

The discipline of mental models entails bringing tacit assumptions, attitudes, and beliefs to
    the surface. Why is this important? (p 67)
What is the ladder of inference? (p. 68-71)
What is the reflexive loop? (p. 71)

3. Shared Vision

What is the discipline of shared vision? (p. 71-3)
What do tools and techniques have to do with shared vision? (p. 72)
What does shared commitment have to do with it? (p. 72)
What do values, goals, and images have to do with it? (p. 72)
How important are openness and disclosure? (p. 72)
How important is dialogue?

4. Team Learning

What is the discipline of team learning? (p. 73-74)
How does the concept of alignment relate to team learning? (p. 74)
How does the concept of "collective inquiry" relate to team learning? (p. 73)
What role do communication skills play in team learning? (p. 74)
How important is dialogue about core values and beliefs? (p. 74)
What is dialogue? (p. 75)
What does it mean to suspend your assumptions, and why is it important? (p.85-6)

5. Systems Thinking

What is the discipline of systems thinking? (p. 78-9)
What is the "iceberg" of events, patterns, structures, and mental models? (p. 80-83)
What are system dynamics, and why are they important? (p. 84)
Two kinds of system dynamics are "reinforcing processes" and "balancing processes."
What are each of them, and why are they important? (p. 84-86)
Three ways of describing system dynamics are causal-loop diagrams, stock-and-flow
    diagrams, and simulation models. What is each, and what are the advantages and
    disadvantages of each? (p. 86-90)
What is "delay," and why is it important? (p. 91)
There are many "systems archetypes" that help us understand the behavior of systems
    (system dynamics).
One of these is "Fixes that Fail." What is this archetype, and why is it important for us to
    understand? (p. 91-2)

(Time: ongoing)

5. Review key concepts for developing a learning community/organization. As the facilitator, you should assist the Starter Team in constructing meaning and understanding related to the Core Concepts in developing a learning community/organization (e.g. Personal Mastery, Shared Vision, Team Learning, Mental Model, and Systems Thinking). It is recommended that you plan on reviewing 1-2 concepts per meeting. Some concepts may take several meetings to review. A sample 7-meeting process is outlined in the table below, which will help to provide a general understanding of how you might organize learning process.

(Time: 6 – 12 weeks)

Sample Summary of a 7-Meeintg Learning Process w/Senge's
Schools that Learn

Meet 1 Starter Team Develops Reading Plan and Readings are Acquired
Purchase the Book: *Schools that Learn*, by Peter Senge et al.

Meet 2 Group Reflection
Dialogue on team learning, dialogue, and working with an agenda
Discussion to apply system thinking to their own lives
Dialogue on personal mastery
(Instructional Strategies: Guiding questions with page numbers and instructional metaphors)

Meet 3 Discussion: Shared Vision and Team Learning
Spend more time discussing dialogue

Meet 4 Discussion: Mental Models and Systems Thinking
Dialogue on the ladder of inference to explain mental models
Connect these two concepts with the *iceberg*
Starter Team members identify a critical event that occurred in the school
    district, and apply that event to the *Iceberg*.
(Instructional Strategies: Visuals—ladder of inference and the iceberg)

Meet 5 Discussion: Review 'the Beer Game' from Senge's *Fifth Discipline*
(Instructional Strategies: Read through and discuss a simulation)

Meet 6 Facilitator Gives a PowerPoint Presentation on Systemic Change
Group Reflection

Meet 7   Reinforcing and Balancing Processes
Starter Team Creates a Causal-Loop Diagram

5.1 As you and the Starter Team review each of the key concepts, you should **assist the team in applying the concepts to real world situations within their school district or their own lives.** For example, you might have the Starter Team create a causal-loop diagram to identify the systemic elements that can affect the 'understanding of data' throughout a collective bargaining process, and to identify what effects that 'understanding of data' can have on systemic elements (see figure below). Causal-loop

diagrams help people to take a systems view of an event. The Starter Team's reflective journals may be useful as the Team engages in examining and reflecting on each of the concepts of a learning community/organization.

(Time: concurrent with 5)
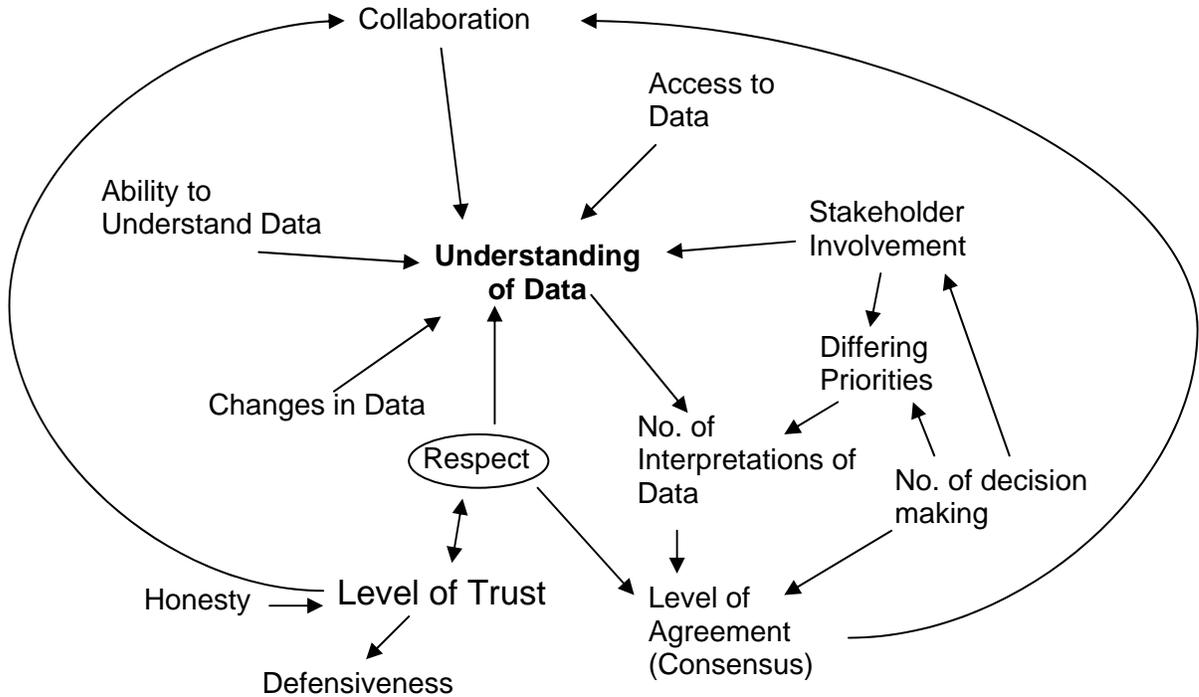
Sample Causal-Loop Diagram: The District's Collective Bargaining

(Time: 2-5 hours)

6. You should assist the Starter Team in recording or documenting their work in each team meeting. This may include using newsprint to record the Team's processing as well as using video or audio recording of sessions, and reflective journaling. Video recordings may be used as a way to distance themselves from the original group processing and then immerse themselves at a higher level of processing where they can reflect on, and engage in, dialogue. Audio recording can be transcribed to provide reflective text for subsequent Starter Team meetings. As facilitator, you should ensure that feedback is always provided to the Starter Team as well as other primary or relevant stakeholder audiences.

(Time: ongoing)

Potential Problems with the Process

The following are some of the problems you may anticipate in trying to conduct this process:

- Starter Team members may not understand the nature of some of the concepts found in the readings and may need to seek clarification from the facilitator.

- This is an opportunity for Starter Team members to begin to disclose their beliefs and values. It can be a difficult task to get participants to focus more on disclosing their individual mindsets than on more distanced logical arguments.

- Patterns may emerge which evidence commonalty across the Starter Team members. There may be a tendency in seeing these commonalties to reify them. It is important that the Starter Team understand the flexibility of these beliefs rather than committing to them, or thinking that they should commit to them.

- Changing mindsets is difficult, and creating an affinity for developing and implementing a learning community/organization may require more time, depending on the dynamics of the Starter Team.

- Starter Team members may come to the meeting unprepared. It is important that email or phone contact be used to encourage participants to complete the readings before attending the next Starter Team meeting.

- It can be quite difficult to get people to complete readings. You may find that the Starter Team feels like they are back in school. You do not want to encourage this "classroom" type atmosphere, particularly as you are not a teacher, but a facilitator. Encouraging Starter Team members to take the necessary time to read, reflect, and converse can be quite a challenge.

- The Starter Team is primarily a group of adult learners, and recognizing the diversity of learning styles present in the group is important for you as a facilitator.

- The readings suggested may be intimidating to the Starter Team members--not only the volume, but the level. It may be necessary for you to seek additional/different resources.

- Be careful not to see this as a single event rather than a continuous one. As an educational experience, there may be a tendency to view your learning about developing a learning community as a one-time thing, but this is just the beginning of your learning journey.

Understandings

Given the importance of helping the people you are working with to understand the need for, and nature of, systemic change, we offer the following suggestions for specific understandings you may wish to work on. Again, please do not feel you have to use these understandings, and we hope you will identify other understandings you think are important. We encourage you to carefully consider *why* you are accepting, rejecting, or adding each understanding.

A. Reading & reflection

How do I motivate the Starter Team members to complete the readings and reflections on their own?
Are the readings suggested appropriate for this group? What about the reading level? What alternatives might I use?

B. Disclosing current mindsets

How can I, as a facilitator, encourage open disclosure?
What patterns are evident in these mindsets and what does that imply about change in this district?

C. Exploring alternative change models

What change models have influenced my thinking as a facilitator about change?
What change models are currently being used in this district?
What support materials, literature, videos or other resources might be brought in to help the Starter Team explore alternative change models?

D. Learning community/organization

How do I best communicate these core concepts without using a traditional "teaching" model?
What core concepts do I think are the most important in this context/to this group?
What additional concepts do I think should be included in this beginning learning stage?
How do I best facilitate the application of these concepts and skills in practical and authentic contexts?
How do I assist Starter Team members in identifying when misconception and misunder-standing enter into their practice of applying these concepts?

E. Facilitator and Starter Team member role

How do I reconcile my roles as facilitator and Starter Team member in applying the concepts of design and re-design?
How do I assist the Starter Team in assuming their dual roles of team members and facilitators of other stakeholders in the change process?