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Leading Change Together:	Reducing Organ	izational Structura	l Conflict through a
Dialogic O	D Approach using	g Liberating Struct	ures

by

Barbara Allen

A Dissertation Presented to the College of Arts, Humanities, and Social Sciences of Nova Southeastern University in Partial Fulfillment of the Requirements for the Degree of Doctor of Philosophy

Nova Southeastern University 2018

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Nova Southeastern University College of Arts, Humanities, and Social Sciences

This dissertation was submitted by Barbara Allen under the direction of the chair of the dissertation committee listed below. It was submitted to the College of Arts, Humanities, and Social Sciences and approved in partial fulfillment for the degree of Doctor of Philosophy in Conflict Analysis and Resolution at Nova Southeastern University.

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Dedication

To those who imagine a whole new way of being and working together in organizations, who strive every day, in their little corner of the world, to bring this vision to life.

Acknowledgments

The spark of inspiration leading to this work comes from experiencing a new way of being together that honors the sacredness of every human and removes the barriers that prevent individuals and groups from realizing their potential. Deep and profound gratitude is extended to co-developers of liberating structures Keith McCandless and Henri Lipmanowicz who welcomed me into their world of practice where edge-walkers dwell. It has been my true honor and delight knowing and working with them. Evermore thanks to Marie Lindquist and Dr. Arvind Singhal for including me in opportunities to more fully experience the practice and transformative power of this work. I am evergrateful to my marvelous chair, Dr. Alexia Georgakopoulos and my distinguished and vibrant committee, Dr. Claire Rice and Dr. Urszula Strawinska-Zanko who all provided critical guidance and gracious encouragement to bring this research to fruition. Unending gratitude to Maria Grace for her true friendship and for connecting me with Hagbros Precision. Thank you to the magnificent leadership team at Hagbros Precision, Leila, Dennis Sr., Josh, Aaron, Cynthie, Dennis Jr. and Alex who all took a chance on inviting a stranger into their built-from-scratch family enterprise to collaborate, and who strive to bring moral leadership to life in their everyday work. Special thanks to the entire stellar Hagbros team of participants whose engagement and input were critical to the success of this project. Thank you to Dr. Sharmon Monagan whose steadfast friendship and instrumental advice got me unstuck during critical times. Finally, thank you to my beautiful children, Eric Allen, Chelsea Allen, and Taylor Allen, my parents Richard and Rigmor Mereness, and my brother & "sister" Ty and Sisi Mereness, whose constant love and belief in me inspire me every day to 'be the change' I want to see in this world.

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Abstract

As leaders must increasingly find ways to include and engage others in a power-with approach to competently meet today's complex challenges, the problem occurs when they find themselves stuck within pre-existing systems structured for exclusion and powerover others. These conventional structures are a source of systemic conflict. This participatory action research/cooperative inquiry case study focuses on the topic of leading organizational change collaboratively in the space between formal hierarchical structures and informal human dynamics using a qualitative methodology. The purpose of this study is to understand how a newly developed Liberating Structures Problem Solving (LSPS) model of facilitation helps participants of a contract manufacturing firm navigate this space through a collaborative dialogic organization development (OD) approach to change within a hierarchical organization structure. The theoretical underpinning of this research is a dialogic OD approach to change using Lipmanowicz and McCandless's liberating structures group processes grounded in complexity science and social constructionism. The methodological approach is cooperative inquiry, a form of radically participative action research. Triangulation of data was employed using video-recordings, observations, reflections and interviews. The study involved 21 participants from different functions and levels within the organization. Findings demonstrate the importance of including diverse participants in dialogic events; improved communication and relationships; reduced tooling costs; and a modified organizational macrostructure to be more inclusive. Implications of this study suggest the LSPS model was instrumental in helping this organization shift from conventional leadership structures towards a shared leadership approach that helped ignite transformational change.

Chapter 1: Introduction to the Study

Background

This study introduction begins describing the pervasive challenge faced by innumerable leaders of organizations who are charged with championing collaborative, transformational change within an inherited hierarchical structure which impedes such efforts. As organizational leaders grapple with the problem of working collaboratively, adaptively and creatively within pre-existent, rigid, conventional structures the case is made for a new approach to leading change within organizations in which power and responsibility are shared throughout the organization. A research gap is identified in the existing literature to explore methodologies that foster enabling conditions for learning, adaptability and innovation within the context of larger bureaucratic structures. The development of the LSPS model is proposed as an attempt to contribute to the body of research exploring how a newly-formed work group, comprised of people from all levels of a manufacturing organization, develops an inclusive, empowering dialogic OD practice. The purpose of the action research/cooperative inquiry case study is articulated within the organizational context to understand how the LSPS model helps study participants practice a shared leadership approach to change within a hierarchical structure. Both an overview of the participant contract manufacturing organization and why I sought to do research in this area are presented. The goals of this research are set forth and the theoretical framework upon which this research draws is mentioned. The chapter concludes by previewing what is to come in the dissertation. The introduction begins by highlighting the difficulty of relying upon conventional leadership structures in an era that demands inclusion of diverse stakeholders, organizational agility, and creative innovation.

The Challenge of Leading Transformational Change within Hierarchical Structures

Many leaders today find themselves in a precarious situation having inherited a rigid hierarchical organizational structure, yet required to lead change adaptively by including and engaging employees to meet unprecedented challenges. Because these acquired organizational structures (e.g., physical facilities, strategies, polices, formal authority) are pre-existent they become almost invisible in everyday organizational life (Lipmanowicz & McCandless, 2013) and as a result, go largely unquestioned. While these conventional organizational structures may have produced results in a society geared towards physical production, they are maladapted and unfit for an economy impelled towards innovation and knowledge production. As the world shifts from an industrial society towards an information society in which economies are closely linked to knowledge creation and innovation, leaders must effectively address globalization, technological revolution, and incessant, rapid-fire change (Uhl-Bien, Russ, & McKelvey, 2007). Given this current economic reality, 21st century organizations are competing in an environment where the production of knowledge and innovation is vital to their very survival (Bettis & Hitts, 1995). With so much at stake, the importance of how leading change in the contemporary organization is understood and approached cannot be overstated.

There is a growing recognition that conventional structures fall far short in addressing the dynamic, distributed, and contextual nature of leadership in organizations (Hunt & Dodge, 2000; Gronn, 2002; Lichtenstein, Uhl-Bien, Marion, Seers, Orton, &

Schreiber, 2006; McKelvey, 2008). An over-reliance on formal hierarchical structures has limited the ability to understand a broader conception of a more democratically led organization. Raelin describes the *leaderful* organization in which the organization is full of leaders where everyone participates in leadership collectively and concurrently through dialogue (2012). He labeled this new leadership approach as Leadership-As-Practice (LAP). Raelin described the kind of leadership which underlies democratic change movements such as organization development (OD), as supportive of a *collective approach based on practices* rather than on the personality of any individual (p. 9). This understanding of leadership as a democratic and collective practice is assumed in this research study. These organizations feature a heterarchical, bottom-up structure where power is distributed and leadership is shared in the pursuit of co-developed goals. This more democratic approach is inspired by humanistic values in which change is produced through full participation by those impacted by the change (Raelin, 2012) through a dialogic practice.

In response to the shift towards more democratic structures, many change practitioners and academics have developed dialogic methods designed to include and engage diverse people in solving problems and leading change together. Among those pioneers are Henri Lipmanowicz and Keith McCandless who developed liberating structures (LS) designed to shape how routine interactions between people are organized, both enabling and constraining what is possible (2013, p. 13). Liberating structures will be described more fully in chapter two.

Statement of the Problem

Organization theory has long acknowledged the informal organization that maintains the essential relational aspects of getting work done outside of the formal bureaucratic structure (Nickerson & Zenger, 2002), yet the vast majority of leadership research has, until more recently, concentrated almost exclusively on the formal side of the organization such as individual leadership activities in hierarchical roles (Uhl-Bien & Marion, 2009). Under this conventional leadership structure, change is initiated and directed from the top of the hierarchy downwards.

Problem. Despite awareness of the need to address informal human dynamics, many leaders from all sectors of society resort to conventional structures that exclude the very people needed to successfully address never-before-seen challenges, in large part because that's the way it has always been done. While many leaders are to be found who yearn for more inclusive and participative practices, their inherited organizational structures do not allow it, and instead, perpetuate and reward conventional leadership practices (Cloke & Goldsmith, 2002; Pan & Howard, 2010). Leaders find themselves in a quandary, wishing for alternative ways to empower their people and lead change, yet stuck in an existing system that thwarts their efforts. The problem is that leaders must work within pre-existing systems structured for exclusion and power-over others, yet must increasingly find ways to include and engage others in a power-with approach to competently meet today's complex challenges. These very structures which rely on keeping people out and exerting power over others are structural sources of conflict. Said another way, hierarchical organizations by design will produce conflict within the organization.

Research Gap

The space between formal hierarchical structures and informal human dynamics is the vanguard of leadership and OD research. The entangled functions between formal top-down administrative structures and the informal, complexly adaptive emergent forces in organizations must work together effectively for organizations to function properly (Uhl-Bien & Marion, 2009). This requires leadership and OD researchers explore methodologies that examine rich, dynamic, contextual and longitudinal data concentrating on processes. The goal of future research must be to foster enabling conditions for learning, adaptability and innovation within the context of larger bureaucratic structures (p. 647).

A more democratic leadership approach to change through dialogic OD practices address the tensions between the informal aspects of organizations and the formal control systems of bureaucracy by offering an approach that recognizes the entangled nature of administrative (formal) and adaptive (informal) activities in organizations (Smith & Graetz, 2006). The development of the LSPS model is an attempt to meet this challenge by incorporating the informal human aspects of work within a formal hierarchical structure through a dialogic practice, thereby creating favorable conditions for the emergence of learning, adaptability and transformative change.

Research Questions

The study is driven by a curiosity to explore if and how a newly-formed working group, comprised of people from different levels and functions within a manufacturing organization, develops a shared dialogic OD practice while leading change using the LSPS model in ways that enable the group to better learn, adapt and change in meeting

challenges and taking meaningful action. The over-arching question guiding the study is designed to capture a snapshot of the whole process and to understand the participant perspective of its impact. The guiding research question is: In what ways does the LSPS model as a dialogic OD approach foster enabling conditions for the emergence of learning, adaptability and change within a hierarchically structured organization? Action research requires that the study reports the impact principally from the participant perspectives (Stringer, 1999), therefore, the first research question is:

RQ1): What did participants learn?

RQ2): In what ways did participants change or adapt, if at all?

RQ3): What, if any, was the impact on the organization?

RQ4): In what ways could this LSPS model be improved?

Purpose of the Study

The purpose of this participatory action research study employing a cooperative inquiry form is to understand how the LSPS model helps participants at a contract manufacturing business in Central Texas practice a dialogic OD approach to change within a hierarchical organization structure. The study's data analysis approach employed qualitative thematic analysis.

This research project directly addresses the research problem inherent in hierarchical systems by designing a dialogic OD approach to group communication and interactions with liberating structures that includes, engages and empowers participants as they tackle the complex challenges of change together. This dialogic approach in participatory organizational change is an expression and practice of a more democratic form of leadership. The terms dialogic OD and shared leadership will be used

interchangeably in this manuscript. Shared leadership will be generally defined in this study as a practice where equality of participation and even distribution of power stimulate multi-party reflective conversations promoting mutual accountability for collective learning and results (Mehra, Smith, Dixon, & Robertson, 2006, Raelin, 2012, Redmon, 2014).

This study focused on a contract manufacturing business established in 2011, specializing in precision tooling and mold-making located in Central Texas. It specializes in providing competitively priced molds, and expertise in fabrication, manufacturing and engineered solutions that get customer concepts to market quickly. Organizational leadership considers itself to be inventive problem solvers for industry. Their current focus is being as efficient as possible lending to an organizational competitive edge at making difficult parts that require multiple processes, all completed in-house. They spend much of their time on process efficiency. The study brought 21 participants from three organizational levels (owner, administrator, production worker) together in workshops structured with new patterns of communication and interaction to generate novel approaches to leading change together that could not have been realized otherwise.

Researcher Context to Study

My work with multiple organizations has largely focused on assisting diverse leadership groups in having essential conversations to solve complex problems. Through this work, I have met diverse people situated within different levels and functional departments within their organizations who are bright, talented, motivated and inspired to find innovative and more humanistic ways of working together. Most often, however, they are constrained by inherited structures consisting of policies and procedures that

stymie doing more important work by consuming their time and energy with bureaucratic mandates. Rather than waiting for the bureaucratic systems to change, I have found that initiating grassroots efforts to change the simpler structures of the here-and-now to get things done is much more conducive to igniting a movement, however small initially, towards creating a work environment that is more inclusive, adaptive and unified. When space is opened to have meaningful conversations about issues the group chooses to address, I have witnessed time and again, people stepping up and engaging in ways that are not possible with conventional group processes. I have found the inclusion of diverse people and the distributed power-with approach infused within liberating structures group processes reduce sources of conflict inherent in a hierarchical approach. These experiences are the impetus for this research study.

Research Goals

In a constantly changing world where hierarchical and controlling approaches to OD and change are failing yet still widely practiced, the need to find simple and accessible approaches to leading change collaboratively is becoming increasingly apparent. The participant organization is hierarchically structured with change initiatives and goals directed by top leadership. They are experiencing accelerated growth putting greater stress on the systems and people to keep pace with ever-increasing demand. This research study was conducted during a time of rapid growth and continual change for the organization and was thus poised for tremendous learning opportunities as diverse participants from all parts of the organization were included in more democratic group processes throughout each of the workshops.

The goals of this research are:

- 1) to help study participants develop a dialogic OD practice by trying out new communication and decision-making patterns embodied within the LSPS model,
- 2) to reduce sources of structural conflict by fostering enabling conditions for the emergence of learning, adaptability and change in the participant organization, and
- 3) to improve the LSPS model for application in other organizational settings.

Terms Defined

Several key terms will be used throughout this manuscript. With varying definitions and interpretations of these terms strewn throughout the literature, this section clarifies the various terms and their meanings.

Hierarchical Leadership: The terms hierarchical, conventional and traditional leadership will be used interchangeably throughout this manuscript referring to the style of leadership perpetuated by a pyramid-shaped organizational structures where power is located at the top and trickles down to expanding numbers of subordinate levels (Uhlig, 2017). Hierarchical leadership is an approach to leadership most often assumed in organizations, based on ideas from the past that uses power-over others to get work accomplished. Whereas hierarchy is often linked to unfavorable ideas and practices labeled as autocratic, bureaucratic and command-and-control, the intent behind the inclusion of alternative words (conventional and traditional) to describe old ways of thinking about things or doing things is to provide safe and accessible language to leaders who are most often an integral part of what needs to change. Using the term 'hierarchical leadership', for example, may cause some leaders who exhibit such ideas and practices to dismiss it under this categorization, whereas the term 'conventional leadership' may be more accessible.

Hierarchical Structures: The terms hierarchical structures and conventional structures will be used interchangeably throughout this manuscript. Whatever transpires in an organization is supported by a structure that directs what is being done and guides how it is being done. Structures are everywhere and include macrostructures and microstructures. A macrostructure is something that is built or designed for the long-run that cannot be easily changed such as buildings, strategies, policies, and core operating processes (Lipmanowicz & McCandless, 2013). Microstructures, on the other hand, are small structures that are routinely selected to facilitate interactions with others such as office space, meeting rooms, presentations, agendas, questions and discussions (p. 10). In contrast to macrostructures, microstructures can be changed easily and inexpensively. Hierarchical or conventional microstructures were manipulated in this study.

Shared Leadership: The terms *shared leadership, dialogic OD, heterarchy* and *leadership-as-practice*, while derived from different sources, are used interchangeably in this manuscript. These terms refer to a more democratic form of leadership as a practice that embraces an inclusive, participative dialogic approach to leading change together. Shared leadership and its attendant terms will generally be defined in this study as a more democratic approach to group communication and interaction patterns where equality of participation and even distribution of power stimulate multi-party reflective conversations promoting mutual accountability for collective learning and results (Mehra, Smith, Dixon & Robinson, 2006; Pearce & Conger, 2003, Raelin, 2012; Redmon, 2014).

Theoretical Framework

The theoretical framework draws upon several theories supporting the advancement towards a dialogic OD approach to change. The discussion begins by

clarifying the need for a shared leadership approach in contemporary organizations by conflict resolution scholar Kenneth Cloke. He makes the case for more democratically led organizations, highlights the dysfunction of hierarchy and names it as a source of systemic organizational conflict. The theoretical discussion then moves to social constructionism advanced by Kenneth Gergen (1982), Theodore Sarbin (1986) and John Shotter (1994), who illustrate how truth, morality, meaning-making and knowledge are all communal productions generated through interaction, dialogue and action. Complex adaptive systems (CAS) theory first advanced by Stuart Kauffman (1995), gets equal theoretical billing as an impetus towards a dialogic OD approach to change. Inspired by Kauffman's work which introduced the idea that it is the nature of systems to selforganize, Ralph Stacey (1991), Harrison Owen (1998), and Margaret Wheatley (2006) pioneered a new body of research experimenting with dialogic practices in organizations. The theoretical discussion then flows to dialogic OD as an emerging conceptual understanding of a set of foundational premises and practices representing the latest thinking in the field of OD and change management put forward by Gervase Bush and Robert Marshak (2015). The theoretical discussion is rounded out with a description of liberating structures as a dialogic OD practice and the introduction of a new model of facilitation named the liberating structures problem solving model (LSPS).

Chapter Summary

Organizational leaders in countless organizations are charged with the considerable task of including and engaging employees to work through complex challenges collaboratively, yet have inherited hierarchical organizational structures which significantly cripple their efforts. This problem is directly addressed in this participatory

action research/cooperative inquiry study which sought to develop a new model of facilitation using liberating structures as a dialogic practice that helps participants experience a shared leadership approach to change in which participation and power are more evenly distributed. The study is situated to directly address the research gap which invites leadership and OD researchers to explore methodologies that examine the dynamic and complexly adaptive emergent forces entangled within formal hierarchical structures. The research questions focus on understanding what the participants learned, how they changed, how the organization was impacted and how the LSPS model could be improved. The three goals of the study are to 1) help participants develop a dialogic OD practice by trying out new communication and interaction patterns, 2) reduce structural sources of conflict inherent in conventional leadership structures, and 3) improve the LSPS model for application in other organizational settings. The LSPS model is an expression of the emerging conceptual understanding of dialogic OD as a theory which draws upon social constructionism and complex adaptive system theories.

Organization of this Study

The dissertation is composed of five additional chapters including a review of the literature, a description of the research methodology, the introduction of the liberating structures problem solving model followed by the findings and discussion of results. The literature review begins with an examination of how hierarchy, by its very structure and attendant mindset, is a source of significant systemic organizational conflict. These sources of conflict will be identified making the case for a more democratic form of shared leadership. The literature review will then trace the historical backdrop of organization development (OD) and change management leading to the newly emerging

conceptual understanding of dialogic OD as a form of shared leadership. Its theoretical foundations rooted in social constructionism and complex adaptive systems theory will then be discussed. Current dialogic OD research examples will be discussed. The method section presents a description of the research design and methodology including why cooperative inquiry was used, how the research design was implemented and how the study was ordered to address the research questions. The inclusion of an additional chapter describing the new model of facilitation representing a dialogic OD approach to leading change together is presented as a working example of the LSPS model in action. Chapter five summarizes the findings supplemented with participants' quotes describing what they learned, how they changed, how it impacted the organization and how to improve the LSPS model for future use. Finally, the last chapter discusses key findings, contributions to the field of conflict resolution and change management and lessons learned. A discussion of the theoretical underpinnings of the study is now presented.

Chapter 2: Literature Review

Chapter Introduction

The review of literature begins with an examination of how hierarchical structure, power and leadership work in concert to systematize significant, persistent conflict within an organization. This leads to a discussion of how a more democratic form of leadership-as-practice as opposed to leadership-as-person, became the presumptive starting place for this research project, informing how OD and change are approached, laying the groundwork for the development of the liberating structures problem solving (LSPS) model. The review of literature then traces the origins of OD and change management leading to a comparison of the diagnostic and dialogic mindsets in their attempts to lead transformational change in organizations. Social constructionism and complexity science which form the theoretical underpinnings of dialogic OD are reviewed. The LSPS model used in this study will then be previewed drawing upon Lipmanowicz and McCandless's liberating structures (2013) and Dewey's (1971) problem solving structure as a dialogic approach to leading change together. Finally, recent research using a dialogic OD approach to change will be examined and the research gap will be identified.

Hierarchy: Built for Conflict

Hierarchical organization structures are ill-designed to meet the adaptive challenges of complex ever-changing environments. It is important to recognize the role these conventional structures play in creating organizational conditions conducive to conflict. This section of the literature review examines three main points: 1) hierarchical structure, power and leadership are inextricably entangled concepts, 2) six dysfunctions of hierarchy are identified and examined as significant sources of systemic conflict, and

3) there is an urgent need for a new approach to leading change in the contemporary organization.

Hierarchy: Structure, Power and Leadership

It is challenging to examine hierarchical structure, power and leadership as distinct and discrete concepts. In truth, these aspects of organizational life are very much entangled. The interplay of these phenomena is further discussed.

Structure. Conceptions of what leadership is, how leaders should use power and how the organization should function are shaped by structure (Astley & Sachdeva, 1984; Pinchot, 1992; Blaug, 2007). When we visualize the structure of the typical organization, a pyramid shape comes to mind representing how the organization functions and defining how relationships should work. Chains of command are delineated that define accountability relationships and communication patterns, departments are partitioned, layers of status and power are made clear with those at the top holding most of the power over decisions and resources (Barth-Farkas & Vera, 2014) while those at the bottom having very little power (Brower & Abolafia, 1997). These conventional structures passed down from one generation to the next are ubiquitous and therefore become almost invisible, largely unquestioned 'facts' of organizational life (Lipmanowicz & McCandless, 2013), perpetuating a leadership mindset that supports the status quo.

Power. Hierarchy is institutionalized power, a fixed set of relations and a rigid demarcation of status (Blaug, 2007). Organizationally it presents layers of stratification (Chandler, 1962; Marglin, 1978; Radner, 1992) and interpersonal interactions designated by distinct asymmetrical power. A full examination of power is beyond the scope of this

study as power is a multifaceted phenomenon. This study will, however, look at where power is situated and how it is exercised within conventional organizational structures.

Locus of power. In countless organizations across the globe the concentration of power at the top separates colleagues into the powerful and powerless (Laloux, 2014) as command-and-control relationships between managers and employees define the quality of relationships and what is and is not possible. The institutionalization of power asymmetries results in a divide between those with power and those without and is a fundamental problem with hierarchical organizational structures of varying degrees (Blaug, 2007). C. Wright Mills argued that the major institutions of society organize power by vesting certain positions, and the individuals holding those positions (Astley & Sachdeva, 1984), with the authority to make decisions about how to distribute key resources controlled by that institution (Mills, 1956). Positions are the organizational conditions and constraints that structure voice and choice, shaping what individuals are able to do and defining what others expect them to do (Brower & Abolafia, 1997). How the inherent power in these positions is exercised determines the quality of organizational life.

How power is used. Hierarchical authority grants formal leaders the power to make sweeping decisions that significantly impact the work of others. They have the power to modify others' states by withholding resources or administering punishments (Barth-Farkas & Vera, 2014). Resources and punishments can be social, (e.g., decision-making opportunities, inclusion, verbal criticism, knowledge, friendship, or ostracism) and material (e.g., opportunity for promotion, budgets, hostile work environment, performance appraisal, sexual harassment, money, work conditions, job termination).

These sources of power are structural in the sense that they reflect the qualities institutionalized within the organization rather than the psychology of particular individuals within the organization (Astley & Sachdeva, 1984, p. 105). These power dynamics stretch throughout the entity, influencing how leadership is viewed and practiced, significantly impacting the quality of organizational life.

Leadership. Leadership paradigms of the last century have been the result of top-down, bureaucratic structures (Uhl-Bien, Russ, & McKelvey, 2007) which place individuals within positions of formal authority. From this historical lens, leadership has been defined as occurring through particular qualities and behaviors of exceptional individuals acting alone (Raelin, 2012; Gronn, 2015). This conventional notion of leadership based upon the "Great Man" theory of leadership beginning in the 19th century held that the advancement of civilization materializes through the accomplishments of great individuals (Raelin, 2015). Indeed, assumptions that strong leadership resides only in the individuals at the top of the organizational hierarchy (Scharmer & Kaufer, 2013; Raelin, 2014; Cloke & Goldsmith, 2002) are pervasive.

Conventional ideas of leadership, grounded in a power-over approach, exalt the few individuals with legitimate leadership status as exclusively having the knowledge, skills, abilities, power, insight, talent and vision to solve all organizational problems. These ideas, which inform how power is used, are often highly problematic for several reasons. A conventional leadership mindset arranges win-lose scenarios emphasizing competition and the need to be right (Weeks, 1992), resolves differences by ignoring or eliminating them, controls others in dyadic power-over relationships (Cloke, 2001; Uhl-

Bien, Russ, & McKelvey, 2007; Raelin, 2014), controls resources (Blaug, 2007) and retaliates through punishment (Markova & McArthur, 2015; Cloke & Goldsmith, 2002).

Adaptation Crucial for 21st Century Organizations

This traditional approach to leading organizations, however, was created for a time that no longer exists. According to Hitt (1998), "we are on the precipice of an epoch" as 21st century organizations are confronted with a complex competitive landscape propelled largely by globalization and the technological revolution (Uhl-Bien, Russ, & McKelvey, 2007). Organizations are now situated within an international arena, populated with an increasingly diverse and talented workforce and organizations can no longer be governed by bureaucratic authority (Raelin, 2014). Leaders today are facing vastly different challenges than their predecessors as they are called upon to work and think across continents, cultures, temperaments and time zones to create innovative solutions to complex and often unprecedented problems (Markova & McArthur, 2015).

Undoubtedly, organizational adaptation within larger social environments is necessary for the survival and wellbeing of the organization (Bettis & Hitts, 1995; Hersted & Gergen, 2013). As change moves forward at a breakneck pace, many organizations have had to put away one-size-fits-all policies to make way for innovative, just-in-time, evolving, made-to-order initiatives (Cloke & Goldsmith, 2002). As this revolution progresses, the old order is "digging in and resisting change" (p. 5). While quantum changes in technology, organizational thinking and human capacity are clearly evident, widespread, deep and consequential, they are often ignored or pushed aside by the institutions that embody hierarchy. This is where structural conflict occurs.

Conflict: Structural versus Personal

Distinction must be made between personal and structural or systemic conflict. In his book *Mediating Dangerously*, Cloke makes a distinction between what he describes as the inner frontiers of conflict resolution that take us deeper into the self, exploring personal issues and the outer frontiers of conflict resolution which examine the social issues and the systems that produce them (2001). Dysfunctional systems seek to maintain the status quo by constructing conflict narratives that personalize systemic conflict. These practices are an attempt to mask or fill in cracks in the system that are laid bare through conflict and are used as an immunity against insight and change (p. 200). This push to personalize conflict created by the system is designed to preserve and protect the system, yet, at the same time, ensures its ultimate downfall.

Six Structural Dysfunctions of Hierarchy

While personal conflict and systemic conflict are invariably entangled, this research looks at and targets hierarchy as a systemic source of organizational conflict. This research focuses on the system of hierarchy that creates, by its very design, sources of structural conflict. A closer look at the system of hierarchy and how its architecture, albeit unintentionally, persistently churns conflict within an organization is presented. Six dysfunctions of hierarchy are identified and examined. Hierarchy quietly and inescapably 1) erodes trusting relationships and encourages bad behavior, 2) excludes and produces inequality, 3) dominates, manipulates and distorts communication, 4) stifles collaboration, 5) suppresses creativity and innovation, and 6) impedes organizational adaptability and efficiency. How hierarchical structures creates conditions conducive to conflict in each of these dimensions of organizational life is further examined.

Erodes trusting relationships and encourages bad behavior. Hierarchy designs the way relationships function and influences the quality of relationships through power inequalities and status differences (Lee & Tiedens, 2002).

Produces power inequalities and status differences. Conventional leadership structures "predictably reinforce hierarchy and bureaucracy, autocracy and injustice, inequality and privilege" (Cloke & Goldsmith, 2002), all sources of organizational conflict. Those at the very top have the power to determine the agenda that directs and shapes the work of others. Leadership decisions are, at their core, acts of power and control over shared issues (Cloke, 2001). Formal leaders are endowed with the power to modify others' states by administering social and material rewards and punishments (Barth-Farkas & Vera, 2014). As mentioned earlier, rewards and punishments can be social, (e.g., decision-making opportunities, inclusion, verbal criticism, knowledge, friendship, or ostracism) and material (e.g., opportunity for promotion, budgets, hostile work environment, performance appraisal, sexual harassment, money, work conditions, job termination).

Power advantages are further accrued by those with higher status as their input is perceived as more valuable than subordinates (Blaug, 2007). Hierarchical systems predictably produce psychological effects in superiors causing them to hold unfavorable critical assessments of those with lower status (Keltner, Gruenfeld, & Anderson, 2003), one which increasingly views them as "shirkers of responsibility and incompetent free-riders, requiring constant supervision and motivation" (Blaug, 2007).

These human dynamics lead to personal resentments, interdepartmental estrangement, resistance to change, feelings of dissatisfaction and rejection, reduced

morale, trust and motivation (Krasman, 2014); all costly consequences of a deliberately-designed system of hierarchy. Power advantages may also contribute to stereotyping and discrimination (Sachdev & Bourhis, 1991), further aggravating existing tensions.

Routinizes distrust. Organizational form and the nature of trust are also closely conjoined and mutually influential (Stephens, 2001). Hierarchical leadership structures erode trust and debilitate relationships (Krasman, 2014). Bureaucratic forms routinize distrust (Stephens, 2001, p. 238) as rules and policies are prioritized over relationships, and human beings are demoted to second place (Cloke & Goldsmith, 2002). Organizational governance processes build upon past mistakes and policies in an attempt to control and manage subordinates such that the "organizational structure becomes the great barrier reef" to trust and human connection (Stephenson, 2009). Hierarchies further provoke anxiety in their ability to summon power to kill an innovation or destroy a career (p. 4).

Teaches people to be obedient and to disengage. Obedience by subordinates to superiors is tacitly understood within hierarchy and creates a population of the obedient (Hersted & Gergen, 2013). Hierarchy teaches employees to suppress their own ability to think creatively and solve problems (Pinchot, 1992) thwarting their initiative as they are conditioned through these constant experiences to not care. Conventional structures routinely quash initiative and dismiss the innovative ideas of employees, imposing external forms of motivation, humiliating and infantilizing the very people needed to accomplish the organizational mission (Cloke & Goldsmith, 2002).

The problem is further exacerbated by employees who actually prefer being told what to do by autocratic management in exchange for irresponsibility and reduced stress

(Cloke & Goldsmith, 2002; Blaug, 2007). Employees become willing to blindly obey hierarchical authority and remain silent to their superiors in exchange for job security. Invariably, however, these structured relationships bring out the darker side of human nature encouraging personal ambition, greed, politics, mistrust and fear at the top while the powerless become resigned and resentful (Laloux, 2014). Subordinate disinterest and their withdrawal from taking responsibility for committing to decisions starts a process where the superiors come to systematically devalue subordinates and reify their lack of judgement (Blaug, 2007). As subordinates grow accustomed to working within hierarchy they learn to comply with external authority, accept the dead weight of history that directs the future, submit to the humiliating experience of working as a subordinate and concede to the psychological immaturity all perpetuated by a structure that suppresses thinking and acting for oneself (Cloke & Goldsmith, 2002; Blaug, 2007). The widespread lack of motivation and engagement seen in countless organizations is an unintended and disastrous effect of unequal distribution of power (Laloux, 2014).

Blames individuals to protect the system of hierarchy. According to Bonazzi, blame is a mechanism designed to mask failings in the organizational structure (1983). Cloke builds upon this idea, by carefully *not* naming people as the problem, but instead naming the system as the problem that structures such power relationships. As conflicts emerge from these dynamics which play out across countless organizations, the ways in which a bureaucracy rooted in hierarchy responds to conflict through avoidance, accommodation or manipulation of the conflict leaves no room for authentic dialogue, negotiation, resolution or innovation (2002).

Excludes and produces inequality. Conventional structures use power to exclude others through a formal distribution of titles, functions and privileges resulting in a structure with steep inequalities (Blaug, 2007). Hierarchy creates a structural landscape where those with leader status are privileged over others with power to influence the way in which work is carried out and organizational resources are distributed (Raelin, 2012; Blaug, 2007). Inequalities are amplified when decisions about who to include and who to leave out are made by leaders who often give more access to supporters and deny access to detractors (Cloke & Goldsmith, 2002).

Hierarchy of authority refers to the degree in which employees can shape the decisions about the ways in which their work is accomplished. Participation in decision making refers to the degree to which employees are able to have voice and choice in structural issues such as policy formulation and resource allocation (Krasman, 2014), both significant forms of organizational power. A highly-centralized organization has a higher degree of hierarchy of authority and a lower degree of participation in decision making.

Conventional organizational arrangements which limit status roles, resources and authority to the exclusive few, however, carry heavy costs. Classification systems that become excessively inflexible with deeply rooted silos, leave leaders and subordinates blind to both serious risks and enticing opportunities (Tett, 2015). As organizational goals, measures and policies are developed without input from people who are closest to the problems and actually do the work (Cloke & Goldsmith, 2002), access to diverse and valuable information is dramatically restricted, hindering understanding of the issues and handicapping organizational progress. As multiple realities likely exist in any given

situation (Boje, 1995), various silos or strata of an organization develop their own narrative illustrating their particular perspectives and experiences of issues (Marshak, Grant, & Floris, 2015). The extent to how much a narrative is valued is closely linked to power (p. 90) as those with little power have little voice. The downside of excluding diverse voices in organizational discourse is the deprivation of valid information leading to uninformed and erroneous conclusions and decisions on any number of organizational issues. Furthermore, the organization cuts itself off from innovative and transformational change (Boje, 2001; Gabriel, 2000; Rhodes, 2001).

Dominates, manipulates and distorts communication. The way in which an organization is structured shapes the meaning and direction of people's relationships and interactions. With impersonal relations and exclusionary practices prevailing, communication is impacted in several ways. The vast majority of work is accomplished through people expressing and listening to messages, answering or asking questions, conveying or receiving directions, making commitments, presenting or answering requests, or giving or receiving support. Each of these interactions "is significantly deformed by the presence of hierarchy, bureaucracy, and autocracy" and the malfunctional need to coerce employees into doing their work (Cloke & Goldsmith, 2002, p.45). As communication is primarily top-down in a hierarchy, the ability to listen and learn are handicapped (Tourish, 2005). An organization's hierarchical structure often results in many communication breakdowns (Spillan, Mino, & Rowles, 2002) which become structural sources of conflict.

Over-simplified communication from the top. Communication breakdowns occur as information travels down the hierarchy, getting further distorted each time it is relayed.

To avoid this distortion, communication is drastically simplified from the top. Executive managers are also often too impatient with the ongoing process of challenging dialogue so the process is short-cut with over-simplified messages (Tourish, 2005). Receiving over-simplified information devoid of context and explanations, those on the bottom of the hierarchy are then forced to guess the actual meaning and end up relying on speculation and rumors to fill in the blanks (Cloke & Goldsmith, 2002, p. 49). This cycle of dysfunctional communication becomes a source of perpetual conflict.

Hierarchy also restricts access to information based on a false need-to-know premise, used to reify the distinctions between those at the top of the hierarchy from those at the bottom (Keltner, Gruenfeld, & Anderson, 2003). By denying access to important information, lower-level employees appear misinformed, unintelligent and unable to behave responsibly fueling the justification for continued hierarchical hegemony (Cloke & Goldsmith, 2002; Blaug, 2007).

No feedback loop. Another problem with hierarchical communication comes from having no formal systemic mechanism for listening and feedback going up the hierarchy (Tourish, 2005). Most of the information regarding problems is known at the bottom, yet most decisions on how to solve them come from the top (Cloke & Goldsmith). Only a few of the many communications from the bottom of the hierarchy will actually make it to the top. These messages, however, are condensed and over-simplified rendering them almost useless. Critical upward feedback is often constrained, misrepresented and discarded (Tourish, 2005, p. 491). Further amplifying the difficulty of upward communication in a hierarchy subordinates are themselves less likely to offer honest feedback to superior because they will be more likely to get promoted when they share

only good news, (Tourish, 2005). *Ingratiation theory* explains the difficulty of upward feedback maintaining those with lower organizational status usually exaggerate the degree to which they agree with people of higher status (Jones E., 1990). The tendency to pass along good news and suppress bad news amplifies the challenges of communication within hierarchy as full and valid information is rarely expressed or heard. With sparse and distorted information, the top is consistently out of touch with the bottom (Tourish, 2005), making critical decisions without full information, resulting in less than optimum decisions (Marshak, Grant, & Floris, 2015), causing, among other things, the bottom to question leadership judgment.

Gossip. Part of the culture of hierarchical organizations that naturally develops to fill in the gaps of corporate silence is the colorful behind-the-scenes network of communication that thrives on hearsay, slander, prejudice and innuendo (Cloke & Goldsmith, 2002, p. 51) further exacerbating conflict generated by sparse information. Gossip often challenges leader authority and is problematic particularly as they seek to implement any kind of change (Noon & Delbridge, 1993). Without a formal structure to make space for open and sometimes difficult conversations, the communication does not stop, but instead goes subterranean through the proverbial company "grapevine" in the form of gossip. This informal mode of communication greatly increases the probability for inaccurate information to be spread, generating even more opportunities for conflict.

Stifles collaboration. In a world characterized by burgeoning global innovation, access to unlimited information, an increasingly diverse workforce and incessant, rapid-fire change, collaboration is a key organizational competency. Today's workplace requires we work and think with new people across continents, cultures, time zones and

temperaments to invent innovative solutions to unprecedented challenges (Markova & McArthur, 2015). We are in a "mind share" economy where people are being asked to think together in innovational and relational ways (p. 10).

The conventional leadership mindset, however, is ill-equipped for such collaboration. It has been trained for a "market share" economy focused on solving analytic and procedural problems calling for rational solutions (Markova & McArthur, 2015, p. 10). Conventional structures divide the organization into separate parts or silos encouraging communication within functional areas (Garvin, 1998) but discouraging cross-functional exchange of information (Hersted & Gergen, 2013) and limiting people's ability to think more holistically about the organization and its purpose (Cloke & Goldsmith, 2001). Hierarchical structures require managers spend much of their time in meetings, limiting their ability to engage in essential problem-solving discussions between various organizational levels and functions (McClelland & Wilmont, 1990). Moreover, the relative isolation of departments within a hierarchical organization structure encourages competition between the departments for scarce organizational resources. This organizational structure makes collaboration with other departments burdensome and further advances conditions ripe for misunderstanding and conflict.

Suppresses creativity and innovation. Exclusion, poor communication, separation and impersonal relations work together in a hierarchy to create conditions that thwart critical thinking, creativity and innovation. Hierarchical design does not allow for distributed actors with diverse talent and experience to contribute to something that emerges without imposing a managerial mastermind (Kornberger, 2017). The overcentralization of functions in a hierarchy reinforces unquestioning conformity and

encourages managers to manipulate employees into obeying rules blindly and shelving their creativity and critical thinking (Cloke & Goldsmith, 2002). Bureaucratic structures and centralized control isolate workers into separate spaces and confine their work to prespecified descriptions, impeding the dynamic interaction so vital to innovation (Uhl-Bien & Marion, 2009). Too many bureaucratic rules stymie the emergence of bottom-up, spontaneous processes and are "a quite extraordinary waste of subordinate knowledge" (Blaug, 2007). The malfunctional communication between leaders and followers thwarts the expression of personal opinions, represses critical-thinking, creativity, and innovation while discouraging learning (Andrews & Knowles, 2011), all arguable sources of conflict.

A mindset that adheres to tradition, stability and experience is pervasive while change, innovation and critical insight are eschewed (Cloke & Goldsmith, 2002) through hierarchical structures, yet the velocity of change calls for everyone to think critically and responsibly to become partners of a self-leading team (p. 69). Creative problem-solving and innovation are sparked by diverse people coming together in dialogue, curiosity, experimentation and play but are weakened by conventional structures that design boring work in isolation from others, deliver dull lectures and impose rigid requirements.

Impedes adaptability and efficiency. While hierarchy interferes with many facets of organizational life, the way in which it impedes the adaptive capacity of the organization to evolve and respond to rapidly changing conditions is among the most serious of its flaws. Unilateral commands strengthen conformity and reinforce rigid silos that repress organizational responsiveness and adaptive action (Ford R., 2012). The burdensome weight of hierarchy, autocracy and bureaucracy, the sluggishness of mistrust

and the accumulation of unresolved conflicts pull organizations down, not simply because real issues are rarely addressed, but because hierarchy as a system resists change and defends itself (David, 1975), despite the best intentions of individuals within the them (Cloke & Goldsmith, 2002). Organizations cannot afford to resist change or cling to what may have worked in the past; yet hierarchies are designed to reinforce and propagate the status quo, perpetuating inefficiencies (Hersted & Gergen, 2013). The quality revolution is a successful attack on bureaucracy inspiring significant progress towards democratic and collaborative work systems demonstrating how teamwork reduces development time and raises productivity (Pinchot, 1992). In a recent Harvard Business Review article addressing leadership and change, one executive stated, "you can't expect to be able to scale, transform and win if you're not creating agile models. It it's top-down, it moves too slowly" (Raelin, 2015).

Looking Ahead to Address the Research Problem

In this increasingly complex, swiftly-changing, unpredictable economic environment, innovation and adaptation are crucial for organizational survival (Hitt, 1998; Tourish, 2005; Uhl-Bien, Russ, & McKelvey, 2007; Hersted & Gergen, 2013). The need for immediacy, agility, responsiveness, matched with the amplified need to be aware of the subtle emergence of future trends is imperative (Wheatley, 2006; Scharmer & Kaufer, 2013; Eoyang & Holladay, 2013; Holman, 2015) in the contemporary organization. Future trends first become evident through conflicts, difficulties and dysfunctions requiring organizations listen *nonhierarchically* to everyone who has a problem or the spark of a new idea wherever they reside within the hierarchy (Cloke, 2001). This reality places organizational leaders squarely in a quandary who seek to

include, empower and engage employees to listen, learn and collaborate, leading change together, yet are bridled with a hierarchical organizational structure that neither acknowledges the value nor makes the space for such activities.

This leadership dilemma is squarely addressed by this research project which is designed to meet an organization, wherever it may be situated along the hierarchical-heterarchical leadership spectrum (discussed below), and assist them in making a shift towards a more democratic and shared form of collective leadership. Many of the problems with hierarchy have been addressed describing how its very structure predictably foments conflict. How organizations respond to conflict and work to create harmony within the organization are now examined.

Two Organizational Responses to Resolve Conflicts

As leaders consider the vast diversity of opposing ideas, functions, needs, inclinations and personalities within its organization, they have a fundamental choice to make around power to create harmony and resolve conflicts. They can passively accept a power-over approach and adhere to an authoritarian structure that relies upon control and coercion exerted through consolidated hierarchical power or rights; or they can choose to adopt a power-with approach relying upon democratic structures grounded in collective dialogue and choice exercised through inclusive collaboration of diverse interests; or some combination of the two (Cloke, 2001, p. 203).

Cloke describes how organizations are on a spectrum of hierarchy from crisis management concerned with survival, to administration concerned with maintaining the status-quo; to management by objectives which are imposed on subordinates, to strategic management occupied with longer-term vision and positioning itself in the market, and

finally to integrated value-based leadership characterized by collaborative relationships, and self-management based on responsibility and consensus. The chart below in Figure 1. depicts the continuum of leadership approaches and how power is used within it.

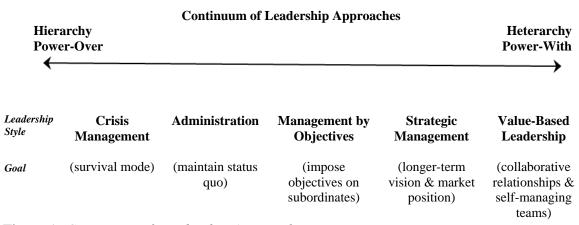


Figure 1. Continuum of Leadership Approaches

This continuum of leadership approaches moves from control and coercion using a power-over approach to a more democratic approach relying on dialogue and choice in a power-with approach.

Danger of addressing systemic conflict. There is a danger addressing systemic conflicts that arise when people who benefit from power structures are confronted by those who are disadvantaged by power structures because it is addictive and corrupting to those it protects (Astley & Sachdeva, 1984; Cloke & Goldsmith, 2001; Blaug, 2007; Barth-Farkas & Vera, 2014). This research study focuses on meeting organizations exactly where they may be on the leadership continuum and provides an opportunity to practice a new way of being together that assists organizations make a shift from hierarchical, power-over practices towards heterarchical, power-with practices as they lead change together. From this researcher's experience, liberating structures are an elegant approach to carefully and sometimes boldly, assist people to safely navigate the inherent dangers associated with shifting the power dynamic in organizations. By helping

people practice respectful inclusion of diverse voices that honors the valuable contributions of others, participants experience first-hand the power of bringing people together and tapping into the creative intelligence of the whole in non-threatening ways; even for those with significantly more power whom old structures protect.

The results of such processes speak for themselves in the ways in which it is not only safe, but engaging and fun for people to tackle challenging issues together. My desire to deepen my learning while adding to the empirical research on the efficacy of liberating structures became the impetus for conducting this research in a real organization. They are highly-accessible, sound group facilitation methods grounded upon inclusive and democratic principles that structure new ways of being together. The LSPS model gently guides people to practice new communication and interaction patterns that break open new possibilities as they lead change together.

Leadership and Change Re-Imagined

Many of the systemic problems with hierarchy have been addressed describing how its very structure predictably foments conflict. The question must now become, how do more democratic organizations using a power-with approach, organize their systems? More democratic organizations reduce barriers by sharing more knowledge and providing opportunities to include diverse people from all parts of the organization in the communication, problem-solving and decision-making processes (Cloke & Goldsmith, 2002; Tourish, 2005; Stephenson, 2009; Raelin, 2012; Scharmer & Kaufer, 2013). In these environments, people can confront each other supportively, rumors are challenged and there is both greater freedom within and responsibility for the success of the organization (Lipmanowicz & McCandless, 2013). As everyone is pulled into these

dialogic processes, less time is spent correcting misinformation, resolving conflicts and doing damage repair from rumors and gossip (Cloke, 2001). The LSPS model is precisely designed to pull diverse people into the dialogic group processes of communication, problem-solving and decision-making using microstructures that enable qualitatively different kinds of human interaction ordinarily found in organizations, giving voice and choice to all participants while unleashing the latent potential within the organization.

Keeping the qualities of a heterarchy in mind, I was compelled to experiment with liberating structures used in a real organization to assist the organization in solving some of their stickiest challenges while leading change together.

Introducing the LSPS Model

The liberating structures problem solving (LSPS) model designed for this study intentionally structures more democratic, inclusive and participative group processes to create conditions for the emergence of latent human potential, closer human connection, new knowledge, innovation and a fresh way of communicating and interacting as empowered participants lead change together. The LSPS model carefully and intentionally leverages inclusive, participative group processes that structure equal time among participants sharing and listening to each other, regardless of where an individual resides on the organizational hierarchy. The space is created to be psychologically safe so that people have one-on-one and small group conversations about the issues they collectively choose to address. In these ways, the problems with hierarchical organizations are greatly reduced by structuring systemic sources of conflict out of the processes. As participants work together over time, they practice reflecting collectively, learning from their experiences and developing organizational adaptive capacity moving

forward. By changing the simple microstructures of how people relate to one another, the power dynamic is shifted and space is cleared for transformational change to take place.

Practicing these group processes helps organizations move from a hierarchical approach towards a heterarchical approach to leading change. It does not happen all at once, but incrementally because it is a learn-by-doing approach. It takes root more deeply as people are continually included to participate and empowered to fully engage in leading change together. The LSPS model will be detailed more thoroughly in Chapter Four.

The review of literature will now address the origins of organization development (OD) to get a better understanding of the hierarchical mindset that shaped the field of OD and its approach to change, which still strongly influence views of the modern organization. This is problematic as organizations and leadership must be re-imagined to become more viable in today's ever-changing environment. Tracing the historical arc of OD and how change is approached will allow us to better understand present-day mindsets that keep organizations stuck in conventional notions that are wholly insufficient to meet contemporary challenges.

Historical Context of Approaches to OD and Change

For the first half of the twentieth century the pervasive view of the organization was as a machine with a laser-like focus on efficiency, productivity and the continuous pursuit of ever-increasing output through various adjustments and tweaks (Marshak R. J., 1993; Morgan, 2006). The last half of the twentieth century brought an interpretive approach to organizations, grounded in new theories and the "soft sciences" which raised peculiar questions about organizations and organizational change (Heracleous, 2004).

Origins of OD and Change Management

At the apex of the Industrial Age in the 1940s and 1950s, the field of organization development (OD) and action research emerged (Barrett, 2015). The early designers of OD were consequently influenced by the ethos of the Industrial Age. Frederick Taylor (1856-1915) strongly influenced this ethos through his *scientific management* theory which aimed to improve economic efficiency, with a particular emphasis on labor efficiency, in which humans were seen as an extension of machinery (1914). Kurt Lewin and Ron Lippitt along with a cohort of their followers (Lewin, 1947; Lippitt, Watson, & Westley, 1958; Jones & Brazzel, 2014) advanced the first organization development and change theories. In the 1960's, Von Bertalanffy's (1968) trailblazing work in biological systems started to get noticed in the field of organization development. The biological model viewed the organization as a living system in which adaptation and alignment with both internal and external forces was emphasized (Katz & Kahn, 1966; Lawrence & Lorsch, 1967; Thompson, 1967). Both the machine and organic views of the organization and the subsequent change models and theories are associated with the "hard sciences" of biology, engineering and physics and strengthen the positivistic approach to organizational diagnosis, the need for change and the way the change process itself is carried out (Marshak, Grant, & Floris, 2015).

Theories and methods in OD including humanistic psychology, group dynamics, survey research methods, planned change, and participatory management all evolved over the years and in the 1960s led to the establishment of the OD Network (Bushe & Marshak, 2015). By the 1970s, the foundational concepts of OD were identified and included process consultation (not prescriptive), the formula for change as a process of

unfreezing, moving and refreezing, action research methods involving data collection, and diagnosis and feedback to identify the actual problems to induce movement from the current "frozen" state to a future desired state by applying a planned intervention grounded in behavioral science research (Marshak R. J., 2014). When the term *organization development* was coined in 1957, these various components were then conceived as an integrated approach to consulting and change resulting in an understandable framework named OD.

As the field of OD has evolved from the 1980s and beyond, Gervase Bushe and Robert Marshak observed as both academics and practitioners of OD how newer practices were applied within older OD frameworks developed in the 1950s, 1960s and early 1970s (2015). They became uncomfortable with this habit as it restricted a deeper understanding of differences and created confusion about what OD is and is not. It also reduced the possibilities of how OD can be practiced (p. 2). They developed a new theory called dialogic OD (Bushe & Marshak, 2009) as an approach to organizational change and consulting. The differences between the conventional diagnostic OD approach and the emerging dialogic OD approach used in this study are further discussed after a brief review of the similar underlying values that inform the field of OD.

Democratic and Humanistic Values Underlying Organization Development

In the chronicles of OD, there are a variety of methods used to enact change that ideologically range from an unyielding autocracy where change is imposed upon others to a liberal democracy where change is shaped by those impacted by the change (Raelin, 2012). This same idea is reflected in Cloke's leadership continuum and the way in which power is used. Both diagnostic and dialogic OD approaches espouse common humanistic

values that skew to the more democratic end of the spectrum. Diagnostic and dialogic OD both value inclusion from diverse participants in attempting to 'level the playing field' in terms of power to invite a variety of interests in the system to be represented in the cocreation of new organizational and relational realities (p. 26). Each seeks to empower participants (Raelin, 2012), to assist in their participative collaboration, and to develop people concurrently with organizational change (Cooke, 1998). Each promotes the facilitative and enabling role of the consultant as opposed to the expert role (Kemmis & McTaggart, 1988; McNiff & Whitehead, 2002), and each aims to develop organizations and larger social systems by raising awareness of the system in order to change it (Bushe & Marshak, 2015). There are however, distinct differences between each of these OD approaches.

Evolution of Diagnostic and Dialogic OD Mindsets

Busche and Marshak identified two types of OD. The first is the conventional approach which draws upon OD theory derived from the 1950s, 1960s and the 1970s called diagnostic OD. The second type, dialogic OD, they describe as "the next step in the evolution of organizational change theory" (Bushe & Marshak, 2016). Dialogic OD is a newly developed and still emerging approach to change grounded in social constructionism and complexity science theories. Any practice of OD and approach to change is a byproduct of the mindset that frames how one sees and interacts with the world including theories, beliefs, assumptions and values (Bushe & Marshak, 2015). An examination of each of these mindsets helps in understanding the differences in practices.

The Diagnostic OD Mindset and the Conventional Approach to Change

The diagnostic OD mindset and its related practices are predominantly used by OD practitioners.

Change as a three-stage process. A primary characteristic of the Diagnostic OD Mindset is the way in which change is viewed. Change is seen as a deliberate and planned process of "unfreezing" a present social equilibrium, generating "movement" to a more favorable future state and then "refreezing" behavior to maintain the change. The field of organization studies has inherited a view of knowledge that assumes stability over process (Barrett, 2015). This epistemological approach is predisposed to structure and permanence and views change as episodic, abnormal, and dramatic. Change practitioners from this tradition see change as discontinuous, out-of-the-ordinary, and a disturbance to stasis. The three-stage model (unfreeze-move-refreeze) proposed by Kurt Lewin (1948) issues from this tradition and assumes the organization is stable and needs a disruption to unfreeze current practices. John Kotter's model (1996) of change management also presumes that organizations fall into a false sense of security and that leaders must impress a sense of urgency to unfreeze current behavior and initiate the change process (p. 72).

Action research. A technique used to implement this three-stage process of change is action research. Conventional ideas of action research begin by diagnosing the current state to understand the forces that are holding the existing reality in place. In this way, it is possible to know how and when to intervene to "unfreeze" and move towards the desired state. Marshak (2013) argued that the diagnostic Mindset assumes there are mistaken beliefs or confusion among people in an organization about what the problems

are; therefore, collecting and correctly interpreting the facts is the assumed starting place for any organizational intervention. Circling back to Cloke's focus on the system of hierarchy as sources of organizational conflict, it is not difficult to see how this diagnostic approach to change, even while grounded in humanistic and democratic values, still relies upon an expert system to diagnose problems and prescribe solutions to the people at the bottom of the hierarchy – the same people who are closest to the work and have much more information about what the real problems and the most viable solutions are.

Emphasis on reducing resistance to change. Lewin believed that reducing resistance to change was more useful than forcing change (1947). Another defining characteristic of the diagnostic mindset is the intent to reduce resistance to change towards the "desired" state that has been identified and initiated by others. Consequently, the diagnostic mindset is more focused on methods and techniques that reduce resistance to change by involving people in the change process. When people are involved in the change process a primary benefit of OD is realized as it brings to life democratic processes and humanistic values essential for a collective learning process that reinforces change (Bushe & Marshak, 2015). As it is practiced from a diagnostic mindset, this learning process usually includes small groups (teams, committees, task forces) who are affected by a change coming together in an action research process designed to diagnose the situational forces and factors to generate motivation and commitment to unfreezing, moving and re-freezing (p. 12) towards the leader-directed desired state. A problem with this approach to change is a leader-defined and leader-directed agenda. When people are excluded from the process in determining what issues are important to address, the

decision-makers are highly likely to be relying upon incomplete and flawed information.

Cloke mentions this idea as a source of structural conflict.

Open systems theory. Another defining characteristic of a diagnostic mindset is the integration of open systems theory in OD which was added in the late 1960s (e.g., Emery & Trist, 1965; Katz & Kahn, 1966; Lawrence & Lorsch, 1967) advancing the idea of organizations as open systems that both influence and are influenced by external environments. Open systems theory led to the development of models of change that sought to strategically align various organizational elements (leadership, mission, culture, strategies, systems, etc.) with each other and the external environment to position the organization for future success (Busche & Marshak, 2015, p. 12). If the elements were in alignment, organizational "health" was deemed to be good. If these elements were out of alignment, then the organization needed to be properly diagnosed to achieve the "healthy" ideal of an "effective" or "high performing" organization (Burke, 2011). This approach is problematic as it seeks to identify a singular problem in a complex situation through proper analysis and applied expertise. There is a tendency to search for the right answers and best practices with a reliance on experts who can apply proven solutions (Bushe & Marshak, 2015). Most often, there are multiple factors that must be addressed and with this diagnostic approach, local ideas and solutions remain untapped resulting in unsustainable solutions imposed from the top.

In summary, a diagnostic mindset orientation tends to treat organizations as objects to be scientifically investigated, analyzed and diagnosed against a "healthy" organizational ideal in which a prescribed solution can be applied to achieve a predetermined outcome. There is a tendency to search for the "right" solution and "best

practices". Change is seen as episodic that includes distinct processes of unfreezing, moving and re-freezing (Bushe & Marshak, 2015). It assumes organizations are open systems that perform best when all their elements are in alignment enabling them to respond effectively to competitive threats and to the environments in which they operate. To "understand" from a diagnostic mindset means to discover the hidden universal truths that exist independently of any observer. These ideas influence how change is undertaken, therefore inquiry happens before change and determines what choices are made about how to change. The actual success rate of change, however, in case studies is well below 50 percent (Beer, Eisenstat, & Spector, 1990; Zarickson & Freedman, 2003) indicating the potential for a new approach to change. The success/failure rate of change practitioners, Bushe and Marshak argued, may be associated with their mindsets as much as it is with the tools and methods they use (2015, p. 20).

Conventional Approach to Change Challenged

This conventional approach to organizational change that views change as an episodic, observable and discontinuous process has been disputed by researchers who investigate change as an immanently interpretive and discursive process (e.g., Barrett, Thomas, & Hocevar, 1995; Heracleous & Marshak, 2004; Marshak & Grant, 2008a; Doolin, Grant, & Thomas, 2013). These researchers understand organizations to be more like an "on-going conversation" as opposed to either a machine or a living organism (Broekstra, 1998; Oswick & Marshak, 2012). With this understanding, it becomes obvious that to change an organization, you must change aspects of discourse and discursive processes. Said another way, changing organizations requires changing the conversations and narratives that occur within them (Ford & Ford, 2008; Shaw, 2002). A

dialogic OD approach to change involves interpretive meaning-making processes that simulate inquiry, focus on how conversations create social reality and view change as a process in constant motion. To "understand" from a dialogic mindset means the truth is something people generate together, therefore inquiry and change occur at the same time and continuously (Bushe & Marshak, 2015). A discussion of this new school of OD thought follows.

The Emerging Dialogic OD Mindset

The dialogic OD mindset makes a shift from thinking of organizations as organisms that adapt to their environment to organizations as conversations where people, drawing from their individual experiences, make meaning and construct reality together from their collective and emerging stories, narratives and discussions. This new shared reality catalyzes action because of self-organizing practices. Dialogic OD is a comprehensive theory that explains why the underlying practices of over 40 different change methods that have emerged from all over the world are successful (Bushe & Marshak, 2016). Table 2 lists examples of dialogic OD methods. as listed in Bushe & Marshak's *Dialogic Organization Development* (2015).

Table 1

Examples of Dialogic OD Methods

1.	Art of Convening (Neal and Neal)	20.	Polarity Management (Johnson)		
2.	Art of Hosting (artofhosting.org)	21.	Preferred Futuring (Lippitt)		
3.	Appreciative Inquiry (Cooperrider)	22.	Reflexive Inquiry (Oliver)		
4.	Charrettes (Lennertz)	23.	REAL model (Wasserman & Gallegos)		
5.	Community Learning (Fulton)	24.	Real Time Strategic Change (Jacobs)		
6.	Complex Responsive Processes of	25.	Re-Description (Storch)		
	Relating (Stacey, Shaw)	26.	Search Conference (Emery & Emery)		
7.	Conference Model (Axelrod)	27.	Six Conversations (Block)		
8.	Coordinated Management of Meaning	28.	SOAR (Stravos)		
	(Pearce & Cronen)	29.	Social Labs (Hassan)		
9.	Cycle of Resolution (Levine)	30.	Solution Focused Dialogue (Jackson &		
10.	Dynamic Facilitation (Rough)		McKergow)		
11.	Engaging Emergence (Holman)	31.	Sustained Dialogue (Saunders)		
12.	Future Search (Weisbord)	32.	Syntegration (Beer)		
13.	Intergroup Dialogue (Nagada, Gurin)	33.	Systemic Sustainability (Amadeo & Cox)		
14.	Moments of Impact (Ertel & Solomon)	34.	Talking stick (preindustrial)		
15.	Narrative Mediation (Winslade & Monk)	35.	Technology of Participation (Spencer)		
16.	Open Space Technology (Owen)	36.	Theory U (Sharmer)		
17.	Organizational Learning Conversations	37.	Visual Explorer (Palus & Horth)		
	(Bushe)	38.	Whole Scale Change (Dannemiller)		
18.	Participative Design (M. Emery)	39.	Work Out (Ashkenas)		
19.	PeerSpirit Circles (Baldwin)	40.	World Café (Brown & Issacs)		
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Note. From Introduction to the Dialogic Organization Development Mindset, by Gervase R. Busche and Robert J. Marshak (2015). Reprinted with permission.

There are numerous methods that can be used both diagnostically and dialogically, but it is the mindset of the practitioner that determines which methods and approaches are used. Bushe and Kassam's (2005) research on appreciative inquiry (AI) found that only the AI projects administered from a dialogic OD mindset resulted in transformational change (to be defined below). Bushe and Marshak argued that successful change practitioners have a foundational theory that informs their practice allowing them to use multiple methods and approaches in order to be adaptive to specific organizational situations. Many practitioners use both diagnostic and dialogic OD dependent upon the situation and their own mindsets. This study explores the use of

liberating structures put forth by Lipmanowicz and McCandless which are reflective of the foundational theory and principles of the dialogic OD Mindset.

Eight key tenets of the dialogic OD mindset. Bushe and Marshak identified eight key tenets of the dialogic OD Mindset (2015). 1) Reality and relationships are socially constructed. There is no single voice of authority or only one objective version of reality. There is, instead, the acceptance that "multiple truths" exist. How people define and describe facts in the world creates meaning in social systems. Diverse actors and a multiplicity of voices must be included and engaged. 2) Organizations are meaning-making systems. As people socially interact with each other, reality and truth are constantly created and re-created through conversations and experiences. Who is included and how they make meaning have more influence on the organization than presumably objective and external factors and forces. 3) Language, broadly defined, matters. Words both written and spoken as well as symbolic forms of expression not only convey meaning, but also create meaning. People's stories and ways of describing experiences and thoughts to others powerfully influence thinking. Changing what words and symbols are used in groups helps to create and sustain change. 4) Creating change requires changing environments. Every day conversations and communications between people construct social reality. Change will occur to the extent that everyday conversations are modified. This happens by changing who participates in conversations, how those conversations take place, improving communication skills, and asking what is being created from the content and process of current conversations. Talk is action. 5) Structure participative inquiry and engagement to increase differentiation before seeking coherence. Participatory action inquiry has expanded the original ideas of action

research. In diagnostic OD, behavioral scientists include client members at various stages in diagnosing themselves and deciding on actions to take. In contrast, the dialogic OD methods reflect a much larger understanding of participation. Inquiry and learning have supplanted diagnostic approaches as ways to engage and change systems. Thus, the processes of inquiry, engagement and reflection are designed to leverage diversity, surfacing a variety of perspectives and motivations without privileging any one while allowing convergences and coherence to emerge. 6) Groups and organizations are continuously self-organizing. In alignment with complexity science, understanding organizations as self-organizing, emergent systems is privileged over seeing organizations as organic, open systems. Instead of seeing organizations as stable entities that occasionally change, they are seen as constantly in flux; in a state of perpetual change, although the rate of change may vary greatly. OD practitioners may accelerate, disrupt, deflect or punctuate these normal processes, but they do not unfreeze and refreeze them. 7) *Transformational change is more emergent than planned.* Transformational change cannot be neatly planned and tightly managed towards some rational, predetermined outcome. Instead, transformation requires holding an intention while moving into the unknown. This involves disrupting current patterns of human interaction in a way that reveals collective intentions and shared motivations. As a result, change processes shift from hierarchical to heterarchical as change can and will emerge from anywhere in the organization. 8) Change practitioners are a part of the process, not apart from the process. The idea that change practitioners can act as objective observers or neutral facilitators of social interaction is refuted. Their very presence is part of the interwoven narrative that has an impact on meaning-making conversations. It is important for change practitioners to be aware and reflexive of their own involvement in the organization and to thoughtfully reflect upon what meanings they are helping to shape. So too, must they consider whose voices they privilege and those with whom they downplay.

In summary, a dialogic OD Mindset assumes organizations are socially constructed realities that undergo continuous processes of self-organization in which meaning-making is perpetually created, maintained, and re-created through diverse narratives, conversations, images, and symbols. The role of the dialogic OD practitioner is to create a safe container or holding space for diverse participants that stimulates new ways of thinking and talking with each other that lead to the emergence of transformational possibilities in pursuit of useful outcomes. This is accomplished, in part, by including greater diversity into ongoing interactions and shifting the discussions from problems to possibilities by using generative questions. As people construct new shared realities and strengthen their interpersonal relationships through a dialogic practice, they are better poised to commit to and engage in the continual work of change.

Table 2 contrasts the differences between the diagnostic OD and dialogic OD approaches.

Table 2

Contrasting Diagnostic and Dialogic Organization Development

Influenced by	Diagnostic OD	Dialogic OD
	Classical science, positivism, and modernist philosophy	Interpretive approaches, social constructionism, critical and postmodern philosophy
Dominant Organizational Construct	Organizations are like living systems	Organizations are meaning- making systems
Ontology and Epistemology	Reality is an objective fact There is a single reality Truth is transcendent and discoverable Reality can be discovered using rational and analytical processes	Reality is socially constructed There are multiple realities Truth is immanent and emerges from the situation Reality is negotiated and may involve power and political processes
Constructs of change	Usually teleological Collecting and applying valid data using objective problem- solving methods leads to change	Often dialogical or dialectical Creating containers and processes to produce generative ideas leads to change
	Change can be created, planned and managed Change is episodic, linear and goal oriented	Change can be encouraged, but is mainly self-organizing Change may be continuous and/or cyclical
Focus of change	Emphasis on changing behavior and what people do	Emphasis on changing mindsets and what people think

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Transformational Change

Dialogic OD makes a clearer connection between OD and transformational change (Gilpin-Jackson, 2015). Marshak described *transformational change* as fundamental shifts in "how we think", how we define "who we are" at work and "how we do our work" as opposed to the well-defined, episodic and time-bound change event (2002). Bushe and Kassam (2005) describe transformational change as "changes in the identity of the system and qualitative changes in the state of being of that system" (p.

162) in contrast to changes in a system that keep the fundamental features of that system intact. According to Bushe and Marshak, "transformational change emerges when actors self-organize to co-construct and sustain generative images of their futures, which disrupt the status quo through narrative/discursive meaning making" (2014). Bushe and Marshak describe three core underlying change processes that, alone or together, are crucial to the successful implementation of any dialogic method. Simply creating spaces where people are willing to say what's on their minds, listen to each other and engage in good dialogue, is not enough for transformational change to occur.

Three Core Processes of Transformational Change

While the change approach methods available to OD practitioners are expansive and getting larger, Bushe and Marshak identify three underlying change processes that are constant among the diverse methods (2015, p. 20).

Change process 1. The first change process involves a disruption in the ongoing social construction of reality, activated in a way that leads to a more complex reorganization. Dialogic OD assumes that organizations are self-organizing. When current social patterns of how people communicate, how conflicts are resolved, how people are included or excluded for example, no longer meet the demands of the present situation, a disruption occurs. Transformational change is improbable without disruption in the meaning-making processes (Holman, 2010, Stacey, 2005). The ongoing patterns of self-organization are always disrupted with transformational change (Busche & Marshak, 2015, p. 21). Disruptions in the current ways of doing things or ways of thinking about things can evoke anxiety, so dialogic OD practitioners seek to influence group processes before, during and after a disruption to assist the emergence of new patterns of self-

organization. The dialogic OD mindset operates with this natural process of disruption and emergence. Groups that face significant risks of maintaining the status quo may be confronted with the urgency and complexity of their situation, which gives rise to a greater sense of chaos – an essential dynamic for self-organizing (Pascale, Milleman, & Gioja, 2001). It is on the edge of chaos that self-organization occurs (Kauffman, 1995) and also when anxiety may be at its highest (Stacey R. , 2005). The dialogic OD practitioner also tends to developing social connections and strengthening relationships and trust, allowing groups to more easily cope with anxiety. Groups are assisted in finding both their common and complementary interests while together making sense of their complex situation (Busche & Marshak, 2015, p. 21).

Change process 2. The second change process includes a change in one or more core narratives taking place. The dialogic mindset believes that words not only convey information, but also strongly influence how we think, what we perceive, what makes sense to us. An assumption of dialogic OD is that what is "real" or "true" in organizations (e.g., what our biggest challenges are, who is influential and who is not, what our goals are and how best to achieve them) are realities that are socially constructed (p. 22). What people believe to be true influences their thoughts and actions and stems from their social interactions. Day-to-day, the conversations evolve into storylines that convey the social construction of reality specifying what is important, what is possible, how things are related and how one should behave (Grant, Hardy, Oswick, & Putman, 2004; Marshak R. J., 1998). Narratives can support the rationale for maintaining the status quo or for illuminating new possibilities. The dialogic mindset assumes that transformational change only happens when the emergence of new, socially-agreed-upon narratives that

clarify and reinforce the new reality and possibilities are supported by those in power (Marshak & Grant, 2008b).

Change process 3. The third change process involves the emergence or introduction of a generative image that offers new and attractive alternatives for thinking and acting. From a dialogic OD perspective, transformational change depends upon new ideas, new conversations and new ways of looking at things. Accordingly, dialogic OD is interested in processes that will cultivate these new conversations, ideas and perspectives. The word generative means the power to generate, produce, or originate (Busche & Marshak, 2015). A generative image is a combination of words, pictures, or other symbolic media that offer new patterns of thinking about social and organizational reality (p. 23). Generative images are indispensable to appreciative inquiry efforts (Bushe, 1998, 2010b, 2013a; Bushe & Kassam, 2005) and key to dialogic success (Bushe G. R., 2013b). Generative images allow people to explore possible alternative decisions and actions that would not have been imagined before the image surfaced. A distinct quality of generative images is that there is something attractive and magnetic about them. People are compelled to act on the new possibilities the image awakens. A compelling generative image invites people to expand their thinking about what is possible beyond what the current narrative and social agreements say is possible. Generative images have the potential to transcend conflict and opposing points of view by helping people move from an either/or, win-lose mindset to a both/and, win-win perspective (Bushe & Marshak, 2015).

Whether all three of the change processes (disruption in meaning-making processes, changed core narrative, emergence of a generative image) are required for

transformational change in an organization is unclear. The dialogic OD practitioner "will knowingly or intuitively mix and match a variety of methods" (p. 25) and will be decidedly attuned to creating an environment or a safe container in which all three of the change processes have the space to emerge.

Theory

Two important intellectual movements that began in the 1980s and 1990s are becoming more widely accepted by scholars and practitioners that have changed the way they think about organizations and change. Interpretivist social constructionism and complexity science strongly inform the dialogic OD mindset and practice.

Origins of the Diagnostic OD Approach to Change Found in the Enlightenment

The Enlightenment gave rise to the maxims of modernist thinking that have informed and shaped the early practice and theories associated with OD. This section describes the origins and evolution of the Enlightenment and outlines how early notions of OD informed by this tradition have been challenged since the 1960s through the emerging theoretical framework of "social constructionism" and complexity science. This discussion helps to shed light on the inherited mindset that designs hierarchical organizational structures that persist today and how that mindset is challenged through social constructionism and complex adaptive systems theories.

Through his work, *Meditations of First Philosophy* (1647), René Descartes (1596-1650) is credited with initiating the Enlightenment. In this publication, he proposed methods to attain objective knowledge. He argued the most important skill to develop in pursuit of knowledge was the ability to have rational thought which must not be influenced by barriers to objectivity such as personal desire, motivation or bias.

Individuals gain objective knowledge when they accumulate observable "facts" and discern the effects those facts have on the external world. His work gave rise to the age of scientific thinking. This positivist approach then took hold of the social sciences. August Comte (1798-1857) and Henri de Saint-Simon (1760-1825) proposed a "science of society" drawing from the natural sciences rooted in a positivistic epistemology (Comte, 1853). Through this stance, they declared that only knowledge acquired through the application of logical representation to sensory experience was legitimate. In an industrial society, this view provided the justification to see the natural and social worlds as things to be dominated and mastered. A linear, cause-and-effect mindset became the prevailing paradigm in which data must be measured mathematically to be valid. Cloke speaks to the challenge of a hierarchical mindset that values facts, evidence and details, yet discounts emotions and intuition as legitimate ways of knowing and sensing. The over-emphasis of only objective knowledge through observable "facts" is cited as a source of conflict in organizations (Cloke, 2001).

This implicit theory of knowledge still strongly influences the field of organization studies today. The formal term for this theory is the *representational theory* of knowledge which assumes the existence of an objective world, separate and apart from a perceiving individual. Under this theory, to acquire knowledge is one's ability to correctly comprehend observable "facts" and then to impartially represent what has been observed.

Currently, researchers in the social sciences routinely use empirical methods such as questionnaires and surveys to discover aggregate differences between various categories of individuals and groups. This practice is based upon the assumption that

below the surface differences, there exist regularities that can be identified and consequently manipulated and controlled to predict cause and effect. This approach has led social science researchers in the quest to discover the regularities and patterns in observable events to solve problems and offer lasting solutions. Frederick W. Taylor (1856-1915) advocated this measurement-based methodology which he named "scientific management" with the intention to increase the efficiency of the industrial factories of that era. Taylor used time and motion studies to improve human performance under the assumption that nothing else would get lost in the process. This approach looked at humans as an extension of the machinery; something to be measured, manipulated and controlled to attain the ultimate outcome of improved efficiency and increased production output (Montgomery, 1989). A positivist approach to social science has led to the continuous search for stable, enduring, predictable relationships that pervade the field of organization development, even today.

Enlightenment tradition disputed. The Enlightenment view of how knowledge is acquired that separates the autonomous self from the independent object was challenged by Martin Heidegger (1889-1976). Heidegger brought background context into the conversation including world views, experiences, beliefs and assumptions that influence the process of how we actually come to know. He named these holistic background concepts and skills "preunderstandings" which help us to get around in the world and make sense of the things we encounter. Heidegger viewed human existence as holistic and humans as "beings in the world", not separate and unaffected by the world in which they live, but ever-involved, absorbing and interrelating with structures, symbols

and other human beings. He argued that the language we inherit equips us with the ideas we use to communicate (Inwood, 1997).

Hans-Georg Gadamer (1900-2002), Heidegger's student, expanded upon Heidegger's line of thought by asserting that all knowledge is interpretation. Gadamer proposed that every perception was an act of interpretation and that every interpretation was based upon biases and prejudices formed by our prior social experiences. In this way, Gadamer challenged the idea of rational separation between the mind and the world. He argued that we meet the world with an inherited language (words, metaphors, symbols) embedded with meaning that determines what we pay attention to, and that we use to interpret our experiences (Gadamer, 1960). These ideas laid the groundwork for social constructionism.

Social Constructionism Emerges

In understanding present day social constructionism, Kenneth Gergen (1935-) underscored the relational nature of being (2009). Who we are and what we know is a consequence of our relationships. Gergen rebuked the idea of humans as (Burgoyne & Reynolds, 1997) independent and self-sufficient with the ability to be impervious to biases and prejudices. He stated:

My hope is to demonstrate that virtually all intelligible action is born, sustained, and/or extinguished within the ongoing process of relationship. From this standpoint, there is no isolated self or fully private experience. Rather, we exist in a world of co-constitution. We are always already emerging from relationship; we can never step out of relationship; even in our most private moments we are never alone. Further, as I will suggest, the future well-being of the planet depends

significantly on the extent to which we can nourish and protect not individuals, or even groups, but the generative process of relating (Gergen K. J., Relational being, 2009, p. xv).

Here Gergen called for a radical reinvention of the ways in which we engage in relationship through various forms of dialogue in every aspect of social life including family life, therapeutic practice, community governance, and organizational change (Barrett, 2015, p. 68). This approach represents a communal way of knowing through a dialogic practice that helps a community achieve desired goals. Gergen renounced the idea that by using a particular diagnostic method, the social dynamics of organizations and change can be better understood and manipulated. He instead emphasized that meaning is something people construct together through dialogue and social interaction.

The four tenets of social constructionism. Based upon the work of Gergen (1982), Sarbin (1986), and Shotter (1994), the following four tenets constitute social constructionism.

The first tenet is *meaning is created through social interactions*. Knowledge is a communal production and is not the result of precise diagnosis or correct representation. Social and cultural meaning are created through interaction. What is true or "real" comes about from relational exchanges within communities (Barrett, 2015). It is a common view that the world exists independent of us, ready to be seen and understood, yet the world we perceive as real is the result of collective agreements about what it is that is important to notice about our world. The implications for a change practitioner require being mindful that knowledge is contingent upon perspective; there is no absolute true perception and

no perception that is independent of social and cultural influences. No objectively true world exists outside of what is historically-communally constructed.

The second tenet of social constructionism is what is good/true/right is a social agreement. Nature does not determine what is "good" or "true", "right" or "moral"; instead, what anyone believes is always the result of a social agreement (MacIntyre, 1981; Bernstein, 1983). Community conceives through social interaction what values and ideologies are legitimate. Individual descriptions of the world are derived from some tradition that values one version over another. The implications for the change practitioner are to be mindful about which narratives are unquestioningly favored and to be concerned about those perspectives which are routinely marginalized.

The third tenet of social constructionism is *our language and interactions are central to social construction*. Discourse shapes the way organizations are structured, maintained, and ultimately transformed. Discourse either supports or challenges current practices and ways of life. Meaning is co-created through interactions of people and does not exist independently in an individual's mind. Conversations are always contributing to social interpretations that both advance and limit what is thought possible. "Social facts" are essentially social agreements and interpretations that are created and re-created by a community (Barrett, 2015). The significance of this for a change practitioner, from a social constructionist perspective, is to consider dialogue as a powerful tool to help participants collectively reimagine possibilities.

The fourth tenet of social constructionism is *knowledge and action are linked*.

While the Enlightenment philosophers and Plato believed the paramount form of knowledge is contemplation, the social constructionist view is reversed. We engage the

world through action, participating in the things we care about and then take time to reflect. From this perspective, knowledge is an active social achievement acquired as we actively engage with others through processes of social negotiation, mutual discourse, and setting up social structures (Barrett, 2015, p. 70). Knowledge and activity are inextricably interconnected. The implications for the change practitioner involve having a broader understanding about what learning is and how it is that we learn. This directly contradicts the diagnostic OD approach that diagnosis must always come before action. The dialogic OD approach favors action first and then engaging in the essential process of individual and collective reflection on that action to create new awareness and reveal new understanding and knowledge.

Relative to social constructionism, complex adaptive systems theory is equally instrumental in influencing the dialogic OD approach to change.

Complex Adaptive Systems Theory

Scientific discoveries of systems in nature, once thought to be chaotic, that actually produce perpetually emerging order has sparked a revolution in thinking about all human processes. Complex adaptive systems theory (Kauffman, 1995) expounds upon this theme and has significantly influenced dialogic OD. Scientific theories emerging from the work of Nobel prize-winning chemist Ilya Prigogine and philosopher Isabelle Stengers in *Order Out of Chaos* (1984), journalist James Gleick's *Chaos: Making a New Science* (1987), biologist Stuart Kauffman's *At Home in the Universe: The Search for the Laws of Self-Organization and Complexity* (1995) and the Santa Fe Institute (2016) outlined the evolution of chaos to complexity to self-organization (Holman, 2015).

Kauffman found that systems will self-organize under a set of a few very simple pre-conditions. These conditions include a relatively safe environment, ample amount of diversity, high levels of potential complexity in the inter-relationships of the elements present, a drive towards positive change, a lack of prior connections, and the whole situation on the verge of chaos (Owen, 1998). Given these conditions, he argued, self-organization is inevitable. Kauffman named self-organizing systems as "complex adaptive systems". The complexity arises from the presence of multiple elements that are interrelated in complex ways.

Organizations as complex adaptive systems. Inspired by this new science, Ralph Stacey (1991), Margaret Wheatley (2006), and Harrison Owen (1998), pioneered a new body of research experimenting with dialogic practices in organizations. In their work, they tried to make sense of organizational life from a holistic perspective that gives primacy to the relationships that exist between ostensibly disconnected parts (Holman, 2015).

In his book, *The Chaos Frontier: Creative Strategic Control for Business*, Ralph Stacey (1991) was among the first to address chaos and its significance for leadership and organizations bringing this emerging complexity theory to the academic world (Holman, 2015). In 1993, he followed this work up with a textbook now in its sixth edition entitled *Strategic Management and Organisational Dynamics* (2011) that situated complexity thinking into the larger body of work on strategy and organization theory literature (Barrett, 2015, p. 134). In 1996 Stacey published *Complexity and Creativity in Organizations* which expounded upon the work of complexity science pioneers in other fields of study. Stacey expressed the intention of his work as an invitation to envision an

entirely new way of understanding organizational life. He offered three central observations of organizational life. 1) creativity lies at the brink of disintegration, existing in a place between stasis and chaos, 2) paradox and creative destruction are a part of creating order. Immanently messy, real dialogue requires emotion, imagination, difference and conflict, and 3) ideas of linear cause and effect dissolve as individual agents interact in spontaneous and voluntary self-organization resulting in emergent strategies (Stacey R., 1996, p. 13).

Margaret Wheatley took her work to the arena of practice. In her book, Leadership and the New Science (2006), she asserted that organizations are designed according to a Newtonian worldview where order, predictability and stability are assumed. Wheatley argued for a new approach to organizational theories, structure and actions grounded in today's science. She described four principles relating complexity science to organizations.

The first principle is *participative processes lead to a richer, more diverse, and vital organization*. Quantum physicists noticed that whether a wave or a particle is seen depends upon the participation of the observer. By directing attention to events and interactions as opposed to things, physicists came to understand that everything is connected. An implication for the change practitioner is as multiple perspectives have the chance to be heard, the field of possibility greatly expands. The intersection of diverse people and data co-mingled with numerous other factors produces richer information laying the groundwork for multiple interpretations and a more varied and textured sense of what is happening and what needs to be done (Holman, 2015). With participation as an indispensable strategy, change practitioners are faced with the task of making it happen

daily by including and engaging diverse participants into activities formerly reserved only for those with formal authority. Dialogic OD becomes the primary instrument for addressing organizational challenges through participation.

The second principle is *relationships are indispensable to forming structures that work*. Relationship is the primary determinant of what is observed and what manifests according to physicists. Invisible connections among the parts are critical to understanding the whole. These unseen forces impact space and behavior. Wheatley argued that vision, values and ethics hold the potential to influence anyone who touches the organization (2006). An organization that works through clear purpose and principles guided by its values has a far greater power than an organization that relies upon rules and procedures.

The third principle is *information organizes matter into form*. In the past, information theory has viewed information as a thing to be manipulated, disseminated and received. According to Wheatley, emerging evolutionary theories understand information to be alive and ever-changing. Information becomes something new and malleable through which new constructs appear; an idea reflective of social constructionism. She identified chaos as the signal catalyst to generating more information. When information flows freely, order and growth result. New knowledge originates from new associations. The implications for organizations according to Wheatley are to be more welcoming to more information from more and diverse sources. She encourages digging for more information that is ambiguous, complex, and of no immediate value (Holman, 2015). Information becomes prominent when diverse participant voices are included, different interpretations are accepted and made sense of

together. Wheatley advocates inviting conflicts and paradoxes to the conversation and then giving participants time and space to process them to create order (p. 132).

The fourth principle is autonomy and self-reference, with a strong frame of reference, generate coherence and continuity. Complexity science illuminates how order emerges out of the seemingly random interactions among individual agents. Wheatley suggested that the world is naturally orderly in which every agent is both unique and interconnected with its environment. Order, unity, and form are created by a few guiding principles without external controls. Wheatley described self-reference as a principle of all self-organizing systems. Self-reference is the idea that "instead of whirling off in different directions, each part of a system must remain consistent with itself and with all other parts of the system as it changes. There is, even among simple cells, an unerring recognition of the intent of the system, a deep relationship between individual activity and the whole" (2006). This holds implications for change practitioners as ongoing dialogue keeps core values and vision alive giving order to a system. Wheatley stated that one of the most difficult concepts to grasp is to support the messy ebb and flow of creative endeavor, and to trust that order will appear. She noted, "We have created trouble for ourselves by confusing control with order" (2006). Both individuals and organizations benefit from supplanting rules and procedures intended to control with visions and values that encourage animated, independent action (Holman, 2015).

The work of Harrison Owen (1998), a forerunner in the application of complexity science in organizations, described the importance of experiencing first and thinking later. He stated,

... nothing compares with the experience. Words that come afterwards as a reflection and deepening of the experience really seem to work. This sounds so obvious when you say it that it hardly seems worthwhile saying ... but the common practice in schools and training institutions is precisely the opposite. We give all the theory and explanations and then say have the experience (in Bushe & Marshak, 2015, p. 136).

Owen's view of complexity can be summarized by three key points. First, all systems are open to each other; interconnected, interdependent and always in motion.

Next, all systems are self-organizing. As open systems interact and coevolve, each imposes demands and offers benefits. This creates a living system that either lives or dies, completely or partially, when it runs out of space or time in which to grow (p. 137).

Finally, opening space for diverse interaction provides the necessary condition for sustaining life. As space is made available for human connection, life can be renewed.

Owen described this as a natural and perpetual process.

Complexity and leadership as a practice. Leadership and how change is led are evolving and adapting to the present-day realities and needs of complex organizations. In response to this complex and ever-changing leadership landscape, scholars have begun to focus on leadership and OD research grounded in complexity theory (Boal & Schultz, 2007; Lichtenstein, et al., 2006; Uhl-Bien, Russ, & McKelvey, 2007; Lord, 2008). The impetus behind complexity science research in organizations is the desire to better understand the nature of organizations as systems and to develop leadership models that more precisely reflect the complex nature of leadership as it exists in practice (Snowden & Boone, 2007).

A few noteworthy works are worth mentioning from business leaders and academics which emerged in the early 2000s that influenced leadership from a complexity perspective. Professor of leadership in the Kennedy School of Government, Ronald Heifetz offered a distinction between technical problems and adaptive challenges (Heifetz, 1998; Heifetz & Linsky, 2002). In-depth organizational experiences were used by Richard Pascale and his associates to encapsulate four principles from complexity science to develop a leadership model (Pascale R. T., 1999; Pascale, Milleman, & Gioja, 2001). David Snowden's Cynefin framework is a commonly used assessment tool developed from his work in knowledge management and organization strategy (Snowden D., 2000; Snowden & Boone, 2007).

Current initiatives in dialogic OD through a complexity lens. Other institutes are bringing complexity perspectives to dialogic OD as a new generation of practitioners forge the way bridging theory and practice. Douglas Griffin and Patricia Shaw worked with Ralph Stacey coediting a series focused on complexity and emergence in organizations (Griffin, 2001; Shaw, 2002). The University of Waterloo's Institute for Social Innovation and Resilience (Waterloo Institute, 2016) addresses inter-disciplinary knowledge about social innovations and their processes including the dynamics of learning, adaptation and resilience. Faculty member Frances Westley co-authored *Getting to Maybe* with Brenda Zimmerman (2007). In this work cases of social innovation founded in complexity highlight new approaches to leading change emphasizing the importance of thoughtful questions to reveal the ambiguities and tensions inherent in complexity, the significance of relationships and the need for curiosity, an ability to accept paradoxes and a willingness to invite multiple perspectives to the conversation

(Holman, 2015, p. 143). The Plexus Institute's mission of "fostering the health of individuals, families, communities, organizations and our natural environment by helping people use concepts emerging from the new science of complexity" (2016) is an example of an organization with the express purpose of improving lives by helping people participate in shaping their future together. The Plexus Institute's Adaptive Practices Network assists leaders and change agents in applying practical methods based on the principles of complexity to break up the status quo and find innovative solutions (2016). Liberating structures are dialogic practices born from this tradition that first originated in the Plexus Institute. Creators Henri Lipmanowicz and Keith McCandless developed group facilitation methods that introduce "tiny shifts in the way people meet, plan, decide and relate to one another ... that put the innovative power once reserved for experts only in the hand of everyone" (Lipmanowicz & McCandless, 2016). The Human Systems Dynamic Institute presents concepts and tools that help to identify and make sense of patterns that emerge from chaos whenever people get together and interact (Eoyang & Holladay, 2013). Creator Glenda Eoyang developed the CDE model which explains the three conditions that influence the path and outcome of self-organizing systems. "C" refers to the container defining the 'self' which is to organize. "D" represents the differences that furnish the motivation to change. "E" refers to the exchange that occurs when individuals and groups connect to each other across their differences (Bushe & Marshak, 2015, p. 144)

Creating conditions for emergence. Holman (2010) offers guidelines for creating conditions for the emergence of learning, adaptability and transformational change. Holman summarized the pattern of emergence as first, a disruption that occurs by

breaking up the status quo. The system then differentiates by surfacing differences and innovations among its parts. As those different parts interact, a new coherence emerges (Holman, 2015). Understanding this pattern of disruption, differentiation and coherence can help inform any individual or group in knowing what to expect and effectively responding with dialogic practice.

Holman describes three activities that help support engagement through this process; 1) creating a container, 2) creating opportunities for individual expression and connection, and 3) reflecting together to find meaning and coherence. The concept of a "container" is defined as "intangible yet real spaces in which the potential and possibility of a group can unfold" (Corrigan, 2015). Three actions help create safe containers to face disruption compassionately; inviting diversity from all aspects of the system, asking possibility-oriented questions, and being welcoming (Holman, 2015, p. 145). Next, creating opportunities for individual expression and connection is the activity that generates differentiation by, drawing from Open Space (Owen, 1992), inviting people to take responsibility for what they love (Holman, 2015). By asking people to pursue what matters deeply to them, their work becomes an act of service, as they contribute what they love to the betterment of the whole. Finally, reflecting together to find meaning and coherence reinforces learning and results in adaptive action. Standing apart from the normal flow of activity allows people to gain a larger perspective in which they can identify new patterns emerging and respond to accordingly. Collectively reflecting upon experiences reifies a new organizational reality.

The process of creating a disruption, surfacing differences and then finding coherence were integrated into this study's workshop design to intentionally create a

space that avoids hierarchical structures conducive to conflict. Status quo mindsets and business-as-usual are upended by purposefully creating disruption. Compliance and uniformity are deliberately dodged by inviting and surfacing differences. Leader-defined diagnoses and expert solutions are steered clear of by allowing the group to find coherence through self-organization.

Implications for the Field of Organizational Development and Change

From a social constructionism perspective, there are implications in the way in which dialogic OD practitioners think about the most appropriate organization interventions. To change a system is a matter of changing the conversations. The most powerful tool for anyone interested in creating transformational change is to introduce a new way of having conversations. If organizations are creations of social agreements, then it is possible to re-create them in inventive ways by changing the conversations in the workplace. Implicit in this approach, new and diverse voices are included and ideas for action formerly on the edge are now fully considered.

Bushe and Marshak describe five essential design elements when creating dialogic events. The first is to assist the sponsors (usually formal organization leaders) express their wishes in a future-focused, possibility-centric way. Appreciative inquiry is a dialogic tool that helps direct the conversation towards a desired outcome for a change initiative that is future-focused rather than describing what is wrong. The second design element is to assist the sponsor in understanding how to nurture emergent change by articulating the purpose to unleash, activate and encourage the diverse ideas among participants in the service of transforming the group in the desired direction. The third design element is to identify and include a necessarily diverse community of

stakeholders. People who are impacted by a change need to be included for a successful dialogic OD event (Bushe & Marshak, 2015). The fourth element is to design and host the conversations so that people are able to interact without small group "facilitation (Weisbord, 2012). The fifth design element is the conversion of possibilities into actions. Each dialogic event makes a shift from inquiry and conversations to initiating action that leads to organizational change. As people make different choices in their daily work in light of the new social realities that emerged as a result of the event, transformational change occurs (Bushe & Marshak, 2015). Each of these dialogic event design elements were included in the research design with liberating structures.

Liberating Structures as a Dialogic OD Approach

Henri Lipmanowicz and Keith McCandless co-developed what they named *liberating structures* (LS) to assist groups navigate more effectively the complexity of organizational life to get things done. In their independent work as organizational consultants they recognized dysfunctions that were pervasive across all types of groups and organizations. A common theme they found was organizational tradition and hierarchy – what they call conventional structures – most often impeded collaboration, creativity, innovation, productivity and human connection. Liberating structures are a disruptive innovation that shake up conventional patterns of human interaction by injecting tiny shifts in the way people meet, plan, decide and relate to one another and put in the hands of everyone the innovative power once reserved for experts only (Lipmanowicz and McCandless, 2013). Liberating structures level the playing field so-to-speak, by designing a safe organizational setting or container where all voices are heard and valued; where participation is equalized, making way for full discussion of relevant

issues and opening space for creative solutions, co-developed to be brought forth by participants who experience the challenges directly.

Macrostructures and Microstructures Defined

Structures are everywhere. Whatever transpires in an organization is supported by a structure that directs and guides what is being done. A *macrostructure* is something that is built or designed for the long-run that cannot be easily changed such as buildings, strategies, policies, and core operating processes (Lipmanowicz & McCandless, 2013). *Microstructures*, on the other hand, are small structures that are routinely selected to facilitate interactions with others such as office space, meeting rooms, presentations, agendas, questions and discussions (p. 10). In contrast to macrostructures, microstructures can be changed easily and inexpensively. It is the microstructures that were manipulated in this study to include and engage everyone according to five design elements. These elements are 1) making an invitation, 2) arranging space, 3) distributing participation, 4) configuring groups and, 5) sequencing and allocating time. Full descriptions of how these processes occurred in the study's workshops are included in chapter four.

Ten Principles of Liberating Structures

Lipmanowicz and McCandless (2013) clarified ten guiding principles that informed the design of each of their 33+ liberating structures. These principles are in accord with Bushe and Marshak's dialogic OD theory, social constructionism and complex adaptive systems theory. 1) *Include and unleash everyone*. Liberating structures help bring this principle to life by inviting everyone touched by a challenge to collaborate in meaningful dialogue and, together, invent new approaches to stubborn challenges. 2)

Practice deep respect for people and local solutions. Experts are often given trust and priority over the people who actually do the work. Liberating structures never start with a pre-defined or exported solution to be shared with others, but instead, create conditions for engagement of people closest to the problem making way for the emergence of realistic and durable solutions. 3) Build trust as you go. Building trust and human connection is always a goal of a dialogic OD practitioner. Trust is fostered by creating a group climate where speaking the truth, even when it's difficult to hear, is valued and shared ownership is the goal. Inclusiveness, embedded in the idea "nothing about me without me", is practiced by inviting input and ideas from everyone. 4) Learn by failing forward. When mistakes are chastised, creativity and innovation are disabled. Mistakes are inevitable and must be embraced as a natural part of the learning process. Creating a safe space for people to debrief honestly about experiences, admitting failures as equally as successes, is crucial to the organizational learning process. Quick, low-cost, low-risk experiments, some of which will fail, must become a part of everyday organizational life to nurture creativity and innovation. Liberating structures allow mistakes to be celebrated as sources of progress. 5) Practice self-discovery within a group. Too often, 'solutions' are imported from the top thereby cutting people off from their own discovery and the peer-to-peer learning processes that happen naturally without interference. Liberating structures help diverse groups engage in meaningful dialogue and encourage experiments on multiple tracks to expedite the learning process. 6) Amplify freedom and responsibility. Hierarchical structures repress both freedom and responsibility. Stephen Covey famously said, 'no involvement, no commitment' (2004). Liberating structures provide minimal but tight constraints to microstructures such as time allocation to free up

people to discuss and act on initiatives they collectively decide will be most beneficial to address. The processes themselves invite personal responsibility because participants are the involved authors of the initiatives. 7) Emphasize possibilities. Believe before you see. Conventional approaches to change focus on problems and finding ways to 'fix' them. Liberating structures flip the orientation of problem-fixing to exposing what is working well, then envisioning possibilities and generating next action steps to explore possibilities. This is important because there is a cultural shift in mind-set from 'what's wrong' to 'what's possible' working to build trust and a culture of learning. 8) *Invite* creative destruction to enable innovation. Most organizations don't have extra time and resources to launch new initiatives on top of what they are already doing, so space needs to be opened to make way for innovation. Many structural relics in the form of hierarchal chains-of-command, policies, and group norms for example, remain active and alive in organizations, not because they work effectively, but because they are largely accepted as unchangeable and therefore go unquestioned and unexamined. Liberating structures, by contrast, initiate questions and open conversations that cast light on the seemingly permanent structures, raising people's awareness that these are human constructs that may need to be dismantled to do the work they need to do. 9) Engage in seriously playful curiosity. While organizational leaders recognize change is necessary, it often spurs anxiety and conflict within the organization because it disrupts the status quo and normal operating routines that feel safe and predictable. Because change creates uncertainty and unpredictability, it is often met with fear and resistance. Liberating structures help leaders approach the change process inviting a playful curiosity with the intention of learning and discovery. Liberating structures are designed to safely address "undiscussable" issues.

The change process is entered in a way that invites fun and imaginative approaches while guiding necessary conflict into constructive channels. 10) *Never start without a clear purpose*. Most organizations have vision and mission statements, however, the translation of that larger purpose at the grassroots level is often missing in people's daily work. Liberating structures are designed to routinely ask participants to delve into why their work is important and meaningful to them and others exploring the deepest need for their work in clear terms. This sense of purpose at both the individual and organizational level creates a stronger connection between an individual's work and the larger community needs being met.

Genesis of the Liberating Structures Problem-Solving Model

In my coursework at Nova Southeastern University in Ft. Lauderdale, Florida in the Department of Conflict Analysis and Resolution, I received instruction and practical experience in facilitation under the guidance of Dr. Alexia Georgakopoulos. In her facilitation course, I learned about a nine-step problem solving structure based upon Dewey's work (1971). This opened my eyes to the structure needed to help a group reach a place that leads to relevant action. Hirokawa & Gouran note that using a structured framework to solve complex problems is likely to develop high-quality solutions (1989).

In my subsequent work with the Clinton School of Public Service, I was introduced to Henri Lipmanowicz and Keith McCandless, co-developers of liberating structures group facilitation methods. Having multiple opportunities to participate in their workshops and assist in conducting workshops with them increased my awareness of the many aspects of group work that could be addressed in novel and creative ways that enliven and uplift the entire process. It became obvious through the principles and the

practice that liberating structures were a novel approach to leading change that removed or greatly reduced structural sources of conflict inherent in a hierarchical approach. As all my education and experience co-mingled in my thoughts, the possibility of merging the nine-steps of problem-solving with liberating structures became an attractive idea for this study. Using the nine steps within workshops offers a systematic framework with groups and guides the processes to a place of agreed-upon action and implementation.

There are many problem-solving structures from which to choose. I selected the Dewey nine-step problem-solving framework because of its emphasis on inquiry and circling back to reflect on both the outcomes and the process, critical aspects to a learning and adaptive organization. These nine steps provide a framework of inquiry for this research project. The nine steps are: 1. define the problem, 2. establish criteria for evaluating solutions, 3. identify root causes, 4. generate alternative solutions, 5. evaluate alternative solutions, 6. select the best solutions, 7. develop an action plan, 8. implement the action plan, 9. evaluate outcomes and the process (Dewey, 1971). Melding these steps with the practices and embedded principles of liberating structures offers a new model of facilitation that guides groups towards action in a semi-structured approach while still allowing the adaptive responses and rich person-to-person dialogue in which sustainable solutions can materialize. As inclusive and diverse groups interact in novel ways in shaping their work together, unpredictable and wildly innovative solutions have the space to emerge.

Introduction to the Liberating Structures Problem Solving (LSPS) Model

We're in a knowledge economy, but our managerial and governance systems are

stuck in the Industrial Era. It's time for a whole new model (Manville & Ober, 2003, p. 48).

Manville & Ober are referring to hierarchical structures and mindsets that keep organizations stuck. Many organizations are bound by inherited structures, designed from the diagnostic OD mindset, that dictate what is and what is not possible. Liberating structures design group experiences that remove or greatly reduce sources of structural conflict inherent in hierarchy, thereby opening space for the emergence of new personal connections, free-flowing communication, equality of participation and equal decision-making power to collectively shape the future together creatively.

To meet organizations exactly where they are and to help them take next steps towards more inclusive and participatory processes, Lipmanowicz and McCandless codeveloped 33+ (more in development) liberating structures to facilitate group dialogic processes designed to help a group achieve its particular objective (See Appendix A). The design of liberating structures allows anyone working with groups the ability to immediately implement one or more of the structures without prior facilitation experience. The simplicity and accessibility of LS are features that enhance usability. The ability to select the best structure to meet the emergent needs of the group also makes liberating structures very adaptable.

Each of the study's three workshops progressed through the LSPS model and concluded with the implementation of agreed upon action plans. As the group reconvened for the subsequent workshops, the process started with reflection upon their actions throughout the implementation phase, which then moved into conversations about what worked and what did not. This reflective dialogue lead to finally re-defining

important issues to address, which then flowed into the next cycle of and action, reflection and dialogue. Model development is described in greater detail in chapter four.

Developmental Aspects of LSPS Model

It is important to mention the developmental aspects of the LSPS model. Practicing new communication and interaction patterns builds capabilities, both individually and collectively. The default understanding of learning is that it happens in the classroom, business meetings, or training sessions for example, in which learning involves processing abstract theories and memorizing facts (Markova & McArthur, 2015). While we are taught to recite the information we have acquired, at the same time, we have not learned how to do anything differently, particularly in real-world circumstances where conflict and pressure to perform are ever-present in complex and ambiguous environments. When learning is disconnected from our bodies, we cannot internalize and manifest what we have learned. If, however, we include in the learning experience a deliberate practice, the learning will be "immediate, effective, and available to us when we most need it" (p. 19). Without explicitly designing workshops to teach and improve communication skills, the LSPS model builds into the problem-solving activities dialogic interactions that develop communication skills including active listening skills, speaking up, staying silent, giving help, and asking for help. These dialogic exchanges also enable the group to attain a higher level of consciousness and creativity through the gradual unfoldment of a shared set of meanings and a "common" thinking process (Schein, 2015). Dialogue enables the group to develop the capacity to think generatively, creatively and most importantly, together (p. 204).

Understanding that these group processes are developmental holds implications for the change practitioner when arranging dialogic events. A theoretical paradigm called the capabilities approach, often used within the development and policy world, begins with a simple question, "what are people actually able to do and to be? What real opportunities are available to them?" (Nussbaum, 2011). Designing a dialogic event could potentially include activities designed to have participants identify both individual and organizational developmental needs and then build experiences to further advance that development more intentionally.

Recent Research Using Dialogic OD Approaches to Change

Examples of recent research which have addressed the interface between formal bureaucratic structures and informal adaptive organizational processes are now reviewed.

Appreciative Inquiry (AI)

Appreciative inquiry (AI) is a dialogic change initiative methodology for studying and changing social systems that invites collective inquiry into the best of what is in order to reimagine and realize a better future together (Cooperrider, 2016). It is premised on the idea that it is better to focus on possibilities than to target what is wrong and try to fix it. A meta-analysis of 20 case studies using AI looked for occurrences of transformational change, defined using seven principles and practices (Bushe & Kassam, 2005). Transformational change was defined as the "changes in the identity of a system and qualitative changes in the state of being of that system" in contrast to "changes to a system that keep the basic nature of the system in tact" (p. 162). The analysis found that only 35% of cases produced transformational change. In those cases, the two distinct outcomes associated with transformational change were 1) new knowledge, models

and/or theories and 2) generative images that inspired new action (p. 162). They found it is better to concentrate on a change in the way people think than on what people do; a standard focus of conventional OD practice. The researchers found that letting go of a more planned change process for a more improvisational change process produced better and faster results than a conventional change approach. The first limitation to this study is that those writing the cases were also consultants to the systems introducing inevitable biases (p. 178). The cases were also not written with the study's categories in mind so the authors cannot be sure if the lack of new knowledge or transformation was a result of how it was written. They do, however argue there are other frames, processes, and techniques that could be used to accomplish what the transformational cases appear to do: (a) generate new, internally validated knowledge that is meaningful to system members and provokes new actions and (b) plan for, and guide, the action phase in a way that supports local innovations without requiring centralized approval. They suggest this study supports further exploration of these two contributions to the theory of planned, transformational change.

Intergroup Dialogue

Intergroup dialogue is a facilitated dialogic public process designed to include and engage communities in conversations about societal issues that are often inherently conflictual such as race, religion and politics (Dessel, Rogge, & Garlington, 2006). As with other dialogic processes, creating a safe container in which to hold often difficult and conflictual conversations is fundamental to the process. Democratic processes that include and respect all parties, encourage valuing differences, cultivate the development

of new communication patterns and listening skills, and create shared meanings are integral features of intergroup dialogue.

Dessel and Rogge (2008) conducted an empirical literature review examining twenty-three studies conducted between 1997 and 2006 including quasi-experimental and pre-experimental research designs and qualitative and quantitative data collection methods (p. 217). The studies were grouped into community, international and academic contexts. The specific dialogic approach, method and process in these studies varied widely. The authors noted the lack of a clear description of how dialogue was implemented lends to the difficulty in replicating studies to confirm their effectiveness (p. 223). The analysis of the literature showed beneficial outcomes across the studies including increased learning among participants and better understanding others' perspectives leading to a greater sense of commonality, increased awareness of social inequalities and power imbalances, improved communication, and stronger interpersonal connections. Limitations included the primary use of case studies in the international context studies, the use of convenience samples, and the non-reporting of survey response rates in many of the studies; all which limit generalizability and conclusions about results. The researchers' recommendations for future research included 1) increased evaluation in community settings as the most rigorous evaluation research of intergroup dialogue has occurred in academic settings (p. 228). The use of quasi-experimental or experimental designs should be used when possible to substantiate the effects of an intergroup dialogic intervention. the overall rigor of methods used to assess Intergroup Dialogue needs improvement as loosely-defined interview processes and anecdotal reports diminish reliability.

Dialogue methods should use established dialogue protocols and measurement tools with rigorous analyses (p. 229) to increase reliability. The dialogue protocols should be fully described and accessible for practitioners for use in replicating as well as improving the methods.

Adaptive Action CDE Model

Glenda Eoyang developed the *CDE Model* positing three conditions (Container, Difference and Exchange) for self-organizing in human systems (2002). The container holds the system together and determines the probability of contact among agents. An example would be a working group who come together within the container of workspace to accomplish mutual objectives. Substantial difference in a system positions a system for change. If the agents of a system were similar, there would be no need for interaction. Exchange refers to the transfer of information, material or energy (Eoyang G. H., 2002). Language is the most obvious method of an exchange between people. Eoyang's study investigated the efficacy of the CDE model in 18 organizational interventions. Multiple methods of intervention were tested including facilitation, Future Search, retreat, process design, meeting design, case studies and organization design (p. 155). Any of these methods can be used to shape the conditions for self-organizing. The efficacy of the CDE model was demonstrated in 14 of the 18 interventions. Eoyang concluded that the CDE model offers a framework to assess organizational needs to design and implement appropriate interventions. She suggested future research could include looking at how select methods and facilitation styles relate to the three conditions for self-organizing. Some methods manipulate the container such as large-scale interventions while others, such as process redesign and cultural diversity concentrate on differences that have a

profound impact on the group. Other methods such as decision making and dialogic models alter the transforming exchanges between agents to shift the performance of a system. Eoyang's CDE model provides another way of looking at the essential elements of self-organization. She points to the need for research in the primary focus of dialogic processes as an exchange between agents that this study addresses.

World Café

World Café is a dialogic process that helps people engage in productive dialogue, strengthen personal relationships, cultivate collective learning and reveal new possibilities for action (Tan & Brown, 2005). Often used for large group facilitations, world café dialogic processes are designed with the assumption that wisdom and creativity are inherent in people enabling them to address and work through even the most difficult of challenges (p. 84). Based upon seven principles, world café encourages large groups to think together imaginatively as a part of a single, connected conversation. A series of world café events were conducted in Singapore including the People's Association, the Housing Development Board, the Singapore Police Force, and people working with local schools among others. These events were designed to bring people together from all domains and levels of society to engage in structured dialogue about important issues, but in a casual, café-style setting with small groups around tables. Tan noted a personal reflection in the entangled space between hierarchy and humanity, "world café is contributing to a culture of dialogue in Singapore – our yearning as a people for having real conversations across boundaries of the hierarchies that so often separate us" (Tan & Brown, 2005, p. 88). A limitation of these studies was the lack of

empirical investigation. The accounts were derived from first-hand experience and interaction from participants, but were anecdotal.

In Michael Grogan's action research (2007) project to help a leadership team of a non-profit organization develop and implement a shared leadership model using world café as a tool to accomplish this. Grogan positions shared leadership as a social process that happens between people who act together to make sense of the situations that face them (p. 1). Grogan designed a single large-scale change initiative event in which 30 diverse participants in the organization generated data to five pre-defined questions focused on how best to implement shared leadership. The findings demonstrated strong broad-based support for the shared leadership model as it fits with the organization's culture, and that the implications of this new model be clearly communicated with the entire organization especially as regards changing roles and responsibilities. Limitations of this study were a lack of external stakeholders and the limited timeframe of the event that lasted only three hours. The most significant limitation, Grogan reported, was the ambiguity of the data generated as people who wrote ideas on sticky notes and left them on tables, but others who had not generated the data had to theme them and was thus subject to their interpretations. Large group engagements are premised on the idea that organizational change is cultivated through short-term, intensive engagement of the whole system. It was recommended to the organization that the research process needs to be ongoing to ensure sustainability over time. A recommendation for future research was to study the type of organization, specifically its mission and culture, that would be more receptive to adopting a shared leadership approach.

Dramatic Problem-Solving Model

In Steven T. Hawkins research, a new model of facilitation was developed merging dramaturgical theater methods with a problem-solving structure (2011) in his Dramatic Problem Solving Model (DPS). This study focused on how an interactive theater-based facilitation model was used for community conflict resolution in a Costa Rican immigrant community. Participants acted as co-researchers by exploring their group-identified conflicts and their needs as a marginalized immigrant community through storytelling and plays. Through this work, they ultimately developed action plans to change the conditions of their community. The study had three goals: 1) empowerment of participants, 2) transformation of a conflict in the community, and 3) improvement of the model. The beneficial impacts from this research were increased hope and optimism resulting in deeper commitment to implement a plan of action for positive change. The participants also reported a greater degree of self-esteem, personal growth, and stronger group cohesion resulting from participation in this study. A reported weakness of the model is the call for a high level of physical and emotional expression and participation, which may have had the impact of dissuading participation for those uncomfortable in such situations. Another weakness was the lack of a structure to invite and include all voices as cultural hierarchy governed who received preference in speaking up. This challenge speaks to the invisible and inherited hierarchy that so often goes unquestioned yet has profound influence of the ability to deeply engage people. A third weakness was the limited scope of the issues chosen to focus on. Some women's issues were not addressed in the project through the consensus decision making process. A fourth weakness of the model was that some important issues (from the facilitator's perspective)

such as the youth drug problem were not addressed because the participants chose another issue to work on (problem of trash). I do not interpret addressing the issues that the participants chose to work on as a weakness of Hawkins' study, but rather as a strength because it gives real voice and choice to the participants. By listening to and acting upon participants' ideas, they gained experience in working together in new ways and realizing incremental improvements in their living conditions which can lead to initiating other more significant change efforts in the future. This particular study is similar to my research project because it developed a new model of facilitation blending a humanistic approach allowing freer expression with a structured approach to guide efforts towards desired change within the community of participants. I am proposing a new model of facilitation (LSPS) that may be more accessible to a wider organizational audience than Hawkins' DPS model as this study using liberating structures does not require high levels of emotional and physical expression, nor does it lack structure to invite and include all voices to the conversation, but instead, builds equalized participation into the processes.

Shared Leadership

The intent of Susan Redmon's research (2014), was to identify the conditions under which *shared leadership* emerged in an integrated organizational team spanning two different business units. The action research methodology was used to identify conditions that either encouraged or discouraged shared leadership as well as actions that helped group patterns of interaction and mindsets to shift towards a shared leadership approach. This study added to the literature by describing the conditions that enabled shared leadership by building capacity for managing complexity and setting the stage for

collaborative problem solving. The study found that two primary encouraging conditions were strengthened: a) social cohesion and b) systems thinking (p. 140). An identified weakness of the study was the way in which the change towards shared leadership was communicated. The researcher learned it would have been more effective to "leverage the hierarchy" initially to create psychological safety for lower level employees to more readily accept and adopt a shared leadership approach. Several elements of organizational support for sustainable change were recommended: "a) spend time early in the process to define what shared leadership is and what changes are expected including outlining a vision for change, b) teach critical skills that enable better dialogue and critical thinking, c) establish time and space for people to meet and converse on a regular basis and utilize a facilitator to guide the process, d) establish clear roles for the formal leaders to effectively steward and sponsor the transformation and provide coaching as needed to support their role change and e) plan to embed the behaviors into annual performance reviews and standard processes to create sustainable change" (Redmon, 2014, p. 167). Like Redmon's research, this study will seek to further understand how to create conditions that encourage a shift towards a more democratic approach to change.

From Theory to Methodology to Practice

It is interesting to note the distinctive parts of a dissertation that separate theory from methodology from practice. As I researched and learned more about social constructionism, complex adaptive systems theory for organizations, the emerging theory of dialogic OD, liberating structures and the process of participatory action research, it continually occurred to me that these are all speaking to many of the same issues using different languages and frameworks. Truly, the theory becomes the methodology which

becomes the practice as each is guided by similar humanistic values and goals. This study is informed and shaped by each of these paradigms in very real and tangible ways.

It was also inspiring to read the studies of other dialogic approaches to change and I plan to learn more and try a few out in my future work. This "Leading Change Together" study embodied elements of appreciative inquiry (AI) in some of the structures used. Did these structures produce new knowledge and generative images that led to meaningful action as the above mentioned meta-analysis of AI suggests are present in cases of transformational change? The intergroup dialogue studies demonstrated usefulness in opening minds, changing attitudes and building friendships but still faced difficulties with omnipresent hierarchies of dominant groups that privileged some while minimizing others. Did my study assist in opening participants' minds while effectively navigating hierarchical structures? The studies also exposed methodological limitations that often lacked rigor and an established documentation of dialogic processes. Does the new LSPS model contribute to establishing one way in which dialogic processes can be carried out? Eoyang's CDE study (2002) was interested in creating conditions for the emergence of self-organizing. Did my study effectively leverage the conditions of a safe and inviting container, expose important differences and design opportunities for unique and meaningful exchange? Like Hawkins' (2011) new DPS model that increased participant self-esteem and group cohesion, but could not completely eliminate cultural hierarchy that minimized the effectiveness of his model, can the LSPS model be more accessible than an approach using theater to solve problems? Can the LSPS model work within a hierarchical structure in an effective way? Redmon's (2014) shared leadership research designed to help a group shift from conventional leadership practices towards a

shared leadership approach demonstrated stronger group cohesion and systems thinking, but failed to adequately leverage the hierarchy to more effectively support the change initiative. Will my study strengthen relationships and enable new ways of thinking about things, even from the top? Does this study have the potential to spark interest in leadership to leverage the hierarchy to support a sustainable change initiative? While all of these questions will not be answered through this study, this project is juxtaposed within the space where each of these studies leave open questions for further exploration and will contribute to the body of knowledge that explores new dialogic approaches to change and conflict resolution.

Focusing on the Research Gap

Uhl-Bien and Marion (2009) identified the need for future research to explore methodologies that concentrate on processes which foster enabling conditions for the emergence of learning, adaptability and innovation within the contexts of larger bureaucratic structures. Burgoyne and Reynolds speak to the disparity that exists between much of leadership development practice and scholarly descriptions of learning theories:

Shifts in our understanding of learning as a more collective and social process, and of managing and organizing as arranging things in a pluralistic context, contribute to a new and much more emancipatory agenda ... facilitating collective learning ... looks like a promising way forward, demanding a whole new set of methods and approaches to practice (Burgoyne & Reynolds, 1997).

This study is positioned to contribute to these research needs by exploring a new model of dialogic practice that seeks to create conditions for the emergence of learning,

adaptability and transformational change situated within bureaucratic structures. The focus of the discussion now turns to the methodological approach of this study.

Chapter 3: Research Method

"Participatory practice treads the fine line between transformative change and maintenance of the status quo" (Ledwith & Springett, 2010, p. 15).

Introduction

This study aimed to understand if and how the LSPS model created conditions for the emergence of transformational change with a working group comprised of people from different levels and functions within a hierarchical organizational structure.

Specifically, the inquiry looked for the emergence of learning, adaptability and change either individually or collectively within conventional organization structures. The study also sought to learn how to improve the LSPS model. A family-owned manufacturing contractor organization was studied as they progressed through a series of workshops structured to engage diverse participants from different functions and levels throughout the organization using liberating structures dialogic processes. A cooperative inquiry model of participatory action research was adopted for this study employing a qualitative thematic analysis approach to data analysis. The central research question was: In what ways does the LSPS model as a dialogic OD approach foster enabling conditions for the emergence of learning, adaptability and change within a hierarchically structured system?

This chapter is organized to first provide an overview the process of designing a qualitative study and a description of the methodological approach (PAR/cooperative inquiry). The discussion then moves to describing how the formal cycles of cooperative inquiry were implemented in this study. How the multiple data collection activities and the three phases of data analysis were executed will then be presented. The chapter concludes with a discussion of researcher reflexivity and reliability and validity issues.

Designing a Qualitative Study

This section describes the process of designing and identifies the features of a qualitative study. How these aspects of qualitative research were carried out will be elaborated upon in subsequent sections of this chapter.

A Process for Qualitative Design

Designing a qualitative study begins with identifying philosophical assumptions the inquirers make which underlie a qualitative approach (Creswell, 2007). An advocacy/participatory theoretical perspective was adopted for this study. From this worldview, the goal of the research is an action agenda for change that has the potential to change the lives of participants, the institutions in which they live and work and perhaps even the researchers' lives (p.21). Kemmis and Wilkinson (1998) cited four main attributes of an advocacy/participatory practice (as cited in Creswell, 2007, p. 22) a participatory practice is dialectical and focused on effecting a sustainable change in practices; 2) its aim is to assist individuals in freeing themselves from structural constraints found in language, work procedures, and relationships of power among other things; 3) it is emancipatory in its ability to encourage self-development and selfdetermination by drawing attention to unjust structures that constrain. A participatory approach aims to create dialogue that precipitates change; and 4) inquiry is completed "with" others rather than "on" others making it both a collaborative and practical approach to inquiry.

This participatory approach informs the design that generally follows the pattern of scientific research. The research design then proceeds to identifying a topic of inquiry and stating a research problem or issue, developing open-ended research questions,

collecting various forms of data to answer the questions, and making sense of the data by arranging information into codes, categories or themes. The final manuscript is a narrative that utilizes rigorous data collection and analysis processes and a qualitative approach (in this case participatory action research/cooperative inquiry); has a primary focus; a compelling account; ethical considerations and a reflection of the researcher's personal experiences, history, and culture (Creswell, 2007, p. 51).

A Process for Data Collection

The process of data collection involves a series of interrelated activities that include but go beyond gathering data with the aim of answering the research questions (Creswell, 2007). These activities include site selection, gaining access and establishing rapport, purposefully sampling, data collection techniques and instruments, recording procedures, field issues and data storage. How these activities were carried out in the study will be further discussed in their respective sections.

A Process for Data Analysis

Qualitative data analysis is a three-phase process including preparing and organizing the data (i.e., text data as in transcripts or field notes) to be analyzed, then finding themes by condensing the data through a process called coding, and finally portraying the data in tables, figures or a discussion (Creswell, 2007, p. 148). Creswell describes the process of analyzing data as moving in analytic circles as opposed to using a rigid linear approach. The process begins by importing raw data and then going through iterative cycles of various aspects of analysis producing a narrative output (p. 150). Figure 2 illustrates the data analysis spiral. Documentation of how these activities were executed in this study is included under data analysis.

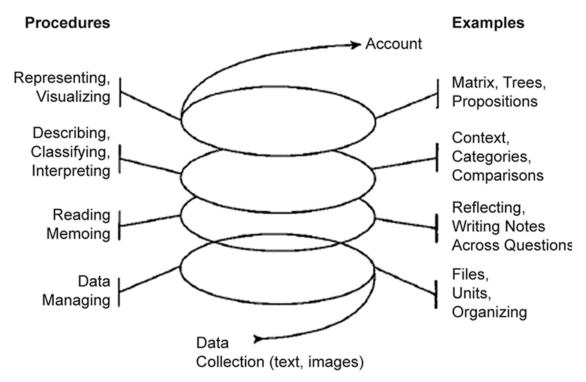


Figure 2. Data Analysis Spiral (Creswell, 2007, p. 151)

Features of Qualitative Research

This study embodies features of qualitative studies defined by Creswell (2007) including:

- Natural setting
- Researcher is a key instrument
- Inductive data analysis
- Participants' meanings
- Design is emergent
- Inquiry is subject to researcher interpretation

The study takes place in a *natural setting*, where participants experience the problem being researched. In this study, the workshops were conducted on site in the participants' natural setting within one of the company's manufacturing buildings. The *researcher is a key instrument* in the study, meaning the data is collected by the

researcher through observations, interviews and documents. The researcher usually does not rely on instruments developed by other researchers. In this study, I developed the interview protocol used in the one-on-one interviews to gather data in addition to group reflections, video recordings and observations gleaned from analytic memos. The ultimate themes are developed from *inductive data analysis* in which the entire database is reviewed in cycles until a comprehensive array of themes emerges. I used qualitative thematic analysis on the data set starting with first-cycle coding and re-coding, then progressed to second-cycle categorizing and cycling through the data again until pervasive themes became evident (Saldaña, 2016). The intent of the research is to understand the *participants' meanings* without imposing researcher or literature meanings to the results. This study is focused on learning how the participants experienced the project, providing an activity of deep learning for the researcher. Through individual and collective reflection in the workshops and outside of the workshops in a private setting (interviews), data was collected on the participants' meaning they assigned to their experiences and insights over the course of the study. The design is emergent as the researcher engages in the study and learns more adaptive ways to respond to what transpires throughout the research process. While I had developed detailed workshop designs prior to each session, the actual workshops had to be adaptive to the participants' input and desired direction within the strict four-hour time limit of each workshop. Some activities took longer than estimated, while others took less time. There were times when the group expressed a desire to pursue a topic of importance necessitating immediate adaptation in design. The *inquiry* is subject to researcher *interpretation*. In the constructed meaning of the data, I acknowledge my own history,

experiences and value system inform the way I interpret what I see, hear and understand.

I will elaborate on this under researcher context.

Research Questions

This study sought to understand if inclusive and democratic dialogic group processes enabled transformative change in an organization operating within a hierarchical structure. Saldaña, suggested aligning questions with the ontological or epistemological inquiry of the study. This study is interested in learning both how people know and how new knowledge or understanding is created through a collaborative dialogic approach, therefore epistemological questions would be more suitable for the interview such as "How does ...?", "What factors influence ...?", "What does it mean to be ...?" (2016, p. 70). In keeping with the study's epistemological stance, the research questions were developed. The guiding research question for this study was: In what ways does the LSPS model as a dialogic OD approach foster enabling conditions for the emergence of learning, adaptability and change within a hierarchically structured system?

Three sub-questions focused on the experiences and insights of participants' transformation process. The fourth question focused on model and project improvement.

- **RQ1):** What did participants learn?
- **RQ2):** In what ways did participants change or adapt, if at all?
- **RQ3):** What, if any, was the impact on the organization?
- **RQ4):** In what ways could this LSPS model or this project be improved?

Research Design

The study employed a cooperative inquiry model of participatory action research to explore if and how a new model of facilitation helped a diverse organizational team

practice new ways of collaborating using a dialogic approach while leading change together. The rationale for this methodology as well as descriptions of participatory action research and cooperative inquiry are described in this section as a precursor to a discussion of project implementation.

Rationale for Cooperative Inquiry

It was essential that the study design be rooted in a methodology that would complement the theory behind and the methods of the new LSPS model. The design needed to accommodate a participant-driven agenda where they could delve into the issues and challenges of their own change initiative that would emerge through the dialogic practices of the LSPS model as the workshops progressed. The project required a methodology that allowed creating a safe psychological "container" where all participants were valued equally and could participate as peers; where they could explore the issues of their choice, make decisions where every voice is heard and counts, co-develop viable solutions and reflect upon their action with meaning-making conversations. It needed to be flexible enough to adapt to the unpredictable emergence of new knowledge and understanding as diverse perspectives melded into the ongoing dialogic processes.

In considering the methodological approach most appropriate for this study, I looked at the array of qualitative methodologies and ended up focusing on the case study and participatory action research as viable options. In the case study, Stake describes some of the attributes of a case as "a specific, a complex, functioning thing," and an "integrated system" with boundaries and working parts (1995). He suggests that, given these attributes, case studies are more appropriate for studying people and programs and less useful to studying events and processes (p. 2). The need for constant participant

involvement in generating the study's direction and the focus on dialogic processes within the workshop events, made the choice for participatory action research more appropriate.

Participatory Action Research

Participatory action research (PAR) is a blanket term used to describe an array of participatory approaches to action-oriented research (Kindon, Pain, & Kesby, 2010). In its most basic form, PAR includes both researchers and participants working together investigating a challenging issue or situation with the goal of improving it (Wadsworth, 1998). The terms action research, participatory action research and action learning are the most frequently used terms to describe research that involves:

A participatory, democratic process concerned with developing practical knowing in the pursuit of worthwhile human purposes, grounded in a participatory worldview ... [and bringing] together action and reflection, theory and practice, in participation with others in the pursuit of practical issues of concern to people, and more generally the flourishing of individual persons and communities (Reason & Bradbury, 2001).

Practitioners of PAR are involved in a variety of research projects within vastly different contexts, applying a wide range of research practices associated with any number of divergent political ideologies (McIntyre, 2008). Within this diverse practice, however, there are essential tenets specific to PAR and are found in most PAR projects:

a) a collective will to explore a problem or issue, b) a readiness to raise both individual and collective awareness of the issue under consideration through reflection, c) a mutual decision to join in action with others to produce beneficial solutions for participants, and

d) the forming of alliances between researchers and participants in planning and implementing the research process (p. 1).

The diagram (Figure 2) below assists in visualizing and better understanding conceptions of conventional research grounded in the 'old science paradigm.

Conventional research proceeds from point A to point B along a linear path, beginning with a hypothesis and coming to a conclusion, in which the work may be published in a journal (Wadsworth, 1998).

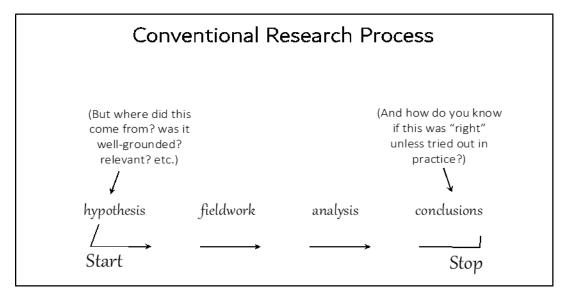


Figure 3. Conventional Research Process (adapted from Wadsworth, 1998):

In contrast to the conventional research process, PAR is a cyclical process of knowledge construction, action and reflection at various and multiple times throughout the research process (McIntyre, 2008). In PAR practice, researchers and participants select an issue or situation they would like to address and improve and then initiate research that draws on capabilities and assets within the group to implement relevant action towards the change initiative. After the action, both researchers and participants reflect upon and learn from their experiences and proceed to a new cycle action-

reflection-research. Figure 4 depicts a diagram of the participatory action research process (Velasco, 2013):

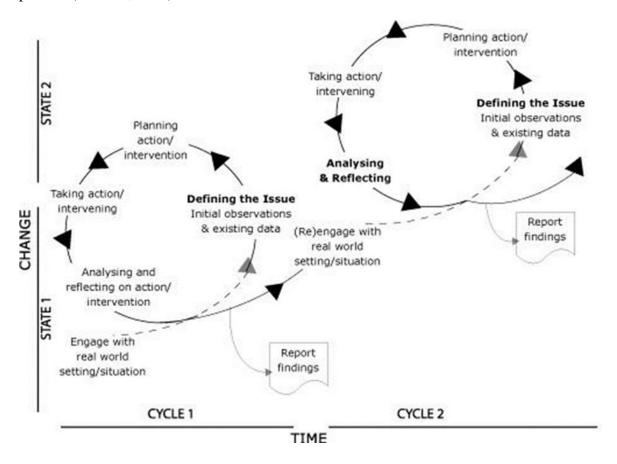


Figure 4. Participatory Action Research (Source: Velasco, 2013)

Proponents of PAR have been confronting the traditional hierarchical relationships embedded within conventional research and action as well as between the researcher and the 'researched' (Wadsworth, 1998). Through their work, advocates have tackled the difficult task of removing assumed hierarchical roles and putting power back in the hands of 'ordinary' people through research with the goal of creating a more adaptable and socially-owned process (Kindon, Pain, & Kesby, 2010). The common goals of PAR are transformation and emancipation brought about by PAR activities and

processes that accrue in applied findings and solutions to real-world problems (Hays & Wood, 2011).

A conventional approach to research, in some ways, utilizes a top-down approach in execution by relying upon experts (including the researcher) and imported "best practices" while assuming that participants don't fully understand their own issues or situation. A conventional approach to action research is antithetical to the purpose and the spirit of this study. After further investigation, the model of participatory action research methodology best able to accomplish the requirements of the study was *cooperative inquiry* detailed below.

Cooperative inquiry. In keeping with the tenets of participatory action research, this methodology is person-centered and participative in which research is done with people, not on them or about them (Heron & Reason, 2006). Reason (1998) emphasized the idea that the purpose of inquiry is human flourishing (p. 3) where people possess and express self-determination and sense-making capacities situated in democratic organizations and communities. He further asserts that organizations need to support human association with the appropriate melding of hierarchy, collaboration and autonomy (p. 419). Cooperative inquiry is described as a "radically participative" form of action research which blurs the line between researcher and subject by creating an environment where participative relationships are cultivated as all are included in reflecting on and drawing meaning about the experiences (Reason & Bradbury, 2001). It is the conjoining of researchers and participants working together to tap into the collaborative intelligence of the group (Kindon, Pain, & Kesby, 2010) that will improve conditions or solve problems. The collaborative relationship between researcher and

researched includes designing, managing and drawing conclusions from inquiry in iterative cycles of action and reflection (Reason P., 1999). This spiraling process of collective action, reflection and dialogue throughout the project, built into the workshop design with liberating structures, makes it possible for participants to co-produce the next steps. Cooperative inquiry delineates four ways of knowing and four phases in which the research is carried out.

Four ways of knowing. Cooperative Inquiry outlines (Reason P., 1999) four ways of knowing that, if they are congruent with each other, will be more "valid – richer, deeper, more true to life and more useful". These forms of knowing include experiential meaning how we know through our experiences, presentational expressed through our stories and images, propositional comprehended through ideas that make sense to use and practical revealed in worthwhile actions in our lives (p. 211). This study incorporated these forms of knowing, built upon an experiential process (experiential) that enabled stories and images to emerge (presentational). It encouraged participants to propose ideas and plausible solutions to sticky challenges (propositional) in pursuit of useful outcomes (practical). Participants from all levels and different functions within the organization were represented in the workshops and participated in the interviews.

Four phases of cooperative inquiry. "A cooperative inquiry cycles through four phases of action and reflection" (Heron & Reason, 2006). Phase one includes participants agreeing on the issues they want to explore; in this case, as related to their chosen change initiative, and then agreeing upon a question(s) they wish to explore. They then agree to take some action through their daily work and define a set of procedures to document their experiences. In phase two, participants implement in their work what they agreed to

do and record their behaviors and outcomes. Phase three involves the co-researchers being fully immersed in their activities, deepening their understandings and perhaps opening themselves to new experiences and creative insights. These three phases occurred throughout all the workshops. Phase four of the inquiry involves the reassembling of the co-researchers to reflect upon their initial questions in light of their experiences. This is a meaning-making session in which they reflect on their experiences that may lead to the development of new questions they may wish to address in their future work.

This reflection occurred collectively at the beginning of each workshop, at the end of the final workshop and individually in one-on-one interviews with participants as the study concluded. The cycles of action, reflection and dialogue through the methodology of cooperative inquiry occurred throughout the project as depicted in Tables 3 and 4 below.

Table 3

Four Phases of Cooperative Inquiry

Four Phases of Cooperative Inquiry								
Phase I Description	Phase II Description	Phase III Description	Phase IV Description					
Agree on or redefine issues to explore	Implement action plan	Co-researchers fully immersed in activities.	Co-researchers re- assembling to reflect on initial questions.					
Agree upon initial questions	Record behavior & outcomes	Open to new experiences and insights	Meaning-making from reflection on					
			experiences.					

Table 4

Four Phases of Cooperative Inquiry Used Throughout the Study

Four Phases of Cooperative Inquiry Used throughout the Study							
Initiation	Workshop #1	Between	Workshop #2	Between	Workshop	Post-	
January-	4/2/2016	Workshops	7/16/2016	Workshops	#3	Project	
March					10/1/2016	Interviews	
2016						October	
	Phase I	Phase II	Phase IV	Phase II		2016	
Phase I	Phase II		Phase I	Phase III	Phase IV		
	Phase III		Phase II		Phase I	Phase IV	
	Phase IV		Phase III		Phase II		
					Phase III		
	Reflection T Dialogue		Reflection Action Dialogue		Reflection T Dialogu	ne e	

Research Implementation

This section describes the implementation of the study from initiation and setting up an inquiry group to post-project interviews. The four phases of cooperative inquiry were embedded within three study workshops. The project was planned as a six-month engagement with three months between each workshop. Figure 2 and 3.2 depict the project's procedural steps. How the research design progressed through the four phases of cooperative inquiry including site selection, access and rapport is further discussed:

Gaining Access

Finding a participant inquiry group with which to conduct the study was a process including many activities that took place over time. These activities are included in the description of how the study was implemented within the four phases of cooperative inquiry as described below. Also to be found in this description are activities related to building rapport, ethical considerations and field issues, although these issues are more formally discussed in the data collection section.

Implementing the Four Phases of Cooperative Inquiry

Setting up an inquiry group – phase one. When beginning a cooperative inquiry, the first step is *Initiation*. As the principal investigator, I began with an idea of researching some enticing new group processes called liberating structures (Lipmanowicz & McCandless, 2013) for my dissertation study after having highly positive and often surprising experiences using them. The next step is to establish a group. I used my personal and professional network to approach organizations who might be interested in being a part of a research study. I was particularly interested in organizations who were experiencing rapid change, an organizational condition I learned was not difficult to find. I did learn, however, that finding a group who was willing to allow a virtual stranger in and expose their people to foreign processes was more difficult than I had first imagined. I approached two different local governmental agencies and had face-to-face meetings proposing my project. Each responded positively saying it sounded like a great project, but that it just was not right for their particular organization. I later spoke with Henri Lipmanowicz, one of the co-developers of liberating structures, about this and he suggested looking outside the governmental sector for an organization that might be more receptive to this type of project. I looked to the private sector and was connected through a friend in my professional network who made the introduction to an organization located in Austin, Texas. I contacted them via email and sent them a participant recruitment letter (Appendix C).

The organization's leadership agreed to a conference call and I spoke with two owners of the firm. During the call, we shared information, answered questions and shared concerns and hopes. The call resulted in agreement to proceed with the study.

Subsequent communication was needed to tie up loose ends and to clarify questions that arose after the initial conference call. We needed to ensure decisions met both researcher and participant organization needs. We discussed practical issues such as dates, times, financial commitment, and participant mix. I followed up with a summary of our conversations and agreement which concluded the *contracting step* of cooperative inquiry.

The next step is to *devise an overall research plan*. It is important to ensure that sufficient time is given to take action and to build in adequate reflection time. This plan needed to meet both the researcher's and the organization's needs. The procedural plan is attached in Appendix D. Defining *roles* in the research process was ongoing throughout the project as situations arose. I primarily worked with an owner who acted in the HR function of the organization and communication flowed through this person primarily. Because the organization was located in Austin and I was in Seattle, face-to-face contact was limited to each of the three workshops and all other communication and coordination had to take place via email and phone calls.

Determining who will write up the reports and results is the next step in the cooperative inquiry process. As the principal investigator, I assumed this responsibility. In addition to this manuscript, I needed to create documents after each workshop that summarized what we did for participants to have their own organizational record. Ground rules may be established to communicate equality of participation and to discuss confidentiality. I video recorded an explanation of the study in which I read the informed consent which described confidentiality among other things, and uploaded it to You Tube

for participants to watch prior to the workshop. The informed consent forms (Appendix E) were collected at the beginning of workshop one.

Phase I – Workshop One

Phase I of cooperative inquiry involves agreeing upon and defining which issues to explore and developing questions. This began when I set up the project with the owners and we came up with a tentative list of issues and goals for the project. At the first workshop, after the study was explained and the informed consent forms were signed, the entire group was invited to generate ideas on issues to explore which will be explained in more detail in chapter four. This study consisted of three separate workshops, each four hours in duration, over the course of six months for one organization. Throughout the workshops, participants had opportunities built into the LSPS model to discuss their experiences and insights with each other and then together, shape next steps. As participants collectively chose challenges to address, we moved through a nine-step problem solving structure using liberating structures (Lipmanowicz & McCandless, 2013). Each workshop concluded with an action plan to be implemented over the course of the next three months. The final part of the workshop was devoted to reflecting upon and talking about group processes targeting how they were working together throughout the workshop. These were discovery and meaning-making sessions in which liberating structures were used to arrange dialogue. The data generated from this collective reflection became a part of the record and was summarized by the principal investigator and presented at the beginning of the next workshop. This information was integrated into the description of processes and outcomes of the LSPS model description.

Phases II & III – Implementation and Immersion in Activities Between Workshops

Phase II began after the first workshop which resulted in the action plan the group decided upon to be put into place prior to the second workshop. Documenting activity and outcomes was a shared responsibility among participants in the organization. Phase III involved a deeper immersion into the experience as co-researchers opened themselves up to new insights and experiences.

The action research process took time to evolve. As I reflect upon what occurred not just during the first workshop, but also in the larger context of people's daily work, the first workshop seems like an event suspended in time away from the normal routines of an ever-expanding business that demanded the immediate priority and attention of its employees. A group of elected representatives from different functions within the organization called the World Class Committee was responsible for initiating the action plan developed from the first workshop. During their meetings and conversations, which I did not have access to, they re-defined the problem they were addressing as their discussions unfolded. This new understanding was communicated to me prior to the second workshop and was integrated into the second formal action research cycle.

Phases IV, I, II & III – Workshop Two

Phase IV of cooperative inquiry – the reassembling of co-researchers to reflect upon and make meaning of their experiences – occurred at the beginning of workshops two and three. During this time, we looked back and reflected upon the action and outcomes relative to what we had set out to do. It was important to frame this as a process of adaptation to emerging circumstances and something we learn as we progress through the study. After looking back through liberating structures activities, dialogue was

structured to gain a greater understanding of what happened and what did not. As a mutual understanding began to emerge it was time to re-visit the issues and adapt the action plans. These processes are described in detail in chapter four.

Importantly, as mentioned earlier, while we were going through a problemsolving structure, we were doing this through highly interactive group processes. As the
primary investigator and the 'expert' on the group processes, it was essential to the
integrity of the study that I did not structure a hierarchy around that idea and employ oneto-all style learning, trying to teach liberating structures. It was important to structure
activities so that participants first had the experience and then had the time to reflect upon
that experience in a much more profound and meaningful way. The human dynamics
dimension of the participants cycled through the four phases of cooperative inquiry
within each workshop as people re-defined issues, practiced new communication patterns
with each activity, opened their minds to new insights and experiences, and engaged in
meaning-making conversations that transformed the way they understood their reality and
each other.

As participants re-assembled for the second workshop, the second formal cycle of reflection, dialogue and action commenced where participants began each workshop with an activity that involved people (especially those closer to the day-to-day operational action) sharing information with others about their progress and challenges in the implementation phase in order to expand understanding of the bigger picture. These learning activities ignited subsequent conversations which were explored through structured time for collective meaning-making leading to re-defining the problem and making appropriate adaptations to the action plans. The second workshop concluded with

time dedicated to reflecting upon and discussing how they all worked together throughout the session as well as between the sessions.

Phases II & III – Implementation and Immersion in Activities Between Workshops

As modified action plans were developed in the second workshop, the group entered the formal action stage of the action research cycle. The group developed two action plans, one in operations and one concerning the human dynamics of the organization. I had no communication with the groups as they implemented their plans. Ideally, I would have liked to have been closer to check in and offer encouragement and/or assistance, but geography did not allow it. There were other circumstances which prevented me from following up via email or phone. The HR manager who was my primary contact, left the organization immediately after the second workshop to pursue her career in architecture. She retained ownership and continued to work with me throughout the duration of the study. Prior to each workshop, I communicated with her about what had transpired since the previous workshop and coordinated the organization of the next workshop.

Phases IV, I, II & III – Workshop Three

Participants re-assembled for the third workshop which began with Phase IV including a group reflection of activities and outcomes during the formal action stage. The sharing of information that included successes and failures set the stage for rich dialogue in determining what to do next. During the action-planning step, particular attention was brought to the issue of sustaining desired changes as they move forward without the researcher present.

As this was the final workshop in this study it was important to express appreciation for allowing me inside their organization. I offered encouragement to the organization in continuing their exploration together. These processes are described more fully in chapter four.

Phase IV- Post-Project Interviews

Over the next few days, I scheduled and conducted 13 one-on-one interviews with participants using the interview protocol as my guide. Each interview began with an explanation of confidentiality and a request to respond openly with the understanding that I was most interested in honest responses, especially critical ones as this would help me to learn and improve the model and processes.

Data Collection

A series of interrelated activities related to data collection were undertaken for this study. Site selection and gaining access commenced the data collection process described above. The data collection process then progressed by establishing rapport, identifying and communicating ethical considerations, purposefully sampling, describing field issues from the organizational context, specifying participant groups, selecting data collection techniques and developing instruments. These activities are now further discussed as they were implemented.

Establishing Rapport

The process of building rapport is not a discrete step in the data collection process, but begins with the very first contact with a potential participant organization.

Assuredly, building rapport began with email communication and continued to grow with each conversation and the execution of the workshops throughout the study. Confirming

the site selection for the study allowed me to seek permission from the Internal Review Board associated with Nova Southeastern University to conduct the research. This process enabled me to further establish rapport by considering and documenting the potential harms and impact that may result from working with human subjects. It also enhanced my awareness throughout the duration of the study to be careful and intentional with the execution of the research. The informed consent was distributed to participants prior to the study with a link to a You Tube video of me introducing the study and reading the informed consent. These activities assisted with establishing rapport early with the group. The articulation of ethical considerations as described below contributed to establishing greater rapport.

Ethical considerations. Ethical considerations that could potentially impact study participants must be given due consideration. Taking part in this research study posed several risks to participants including confidentiality, psychological, emotional and physical factors.

Respect for privacy and confidentiality. One of the objectives of using liberating structures group processes is to build trust among participants as they work together leading change. The very nature of the one-on-one interaction is conducive to developing bonds of familiarity and connection that potentially grow into trust as people get to know each other at a more human level. This sharing of personal stories or information, however, carries the risk of participants sharing others' information outside the study. As such, confidentiality of information shared could not be guaranteed. The risk was minimal, but lasted the duration of the study. To mitigate this risk, participants were informed of this risk when sharing personal information. Participants were asked to

respect their cohorts by keeping the personal information shared in the session confidential.

Psychological. Experiencing psychological discomfort was a moderate risk throughout this study. When bringing diverse people together and addressing sometimes difficult issues, people may experience psychological discomfort. A little uneasiness is a natural part of the problem-solving process, however, the liberating structures methods used throughout every activity in these workshops, were designed to minimize discomfort and help make talking about 'sticky' issues much easier. The participant organization's leadership recognized this and sought neutral assistance in navigating some of their organizational challenges indicating they were prepared to develop more organizational resiliency. To lessen the risk of psychological discomfort, the participants were informed of the potential of this risk so that they were better psychologically prepared before the beginning of the study. They were informed of the voluntary nature of the study and told if, at any point, the psychological impact of the study becomes too great, they could withdraw from the study with no negative repercussions.

It is important to fully inform participants that the process of leading change can, at times, be uncomfortable and this is a normal part of the process to be expected. On the investigator end, it was of the highest priority to create an environment that was psychologically safe and accepting of all points of view and experiences. The group processes were structured in such a way as to neutralize what could otherwise be perceived as difficult topics and to set the stage for both safe and bold conversations. People had multiple conversations with each other and no one was put on the spot. Many of the liberating structures facilitation methods are designed to be fun while participants

do serious work. The investigator is well-practiced in re-framing ideas in a non-threatening way that diffuses tension. Additionally, after many activities, there was a built-in reflection and debriefing process in which they talked about their experience of what just happened.

Emotional. There is a minimal risk of possible embarrassment at a particular individual's remarks during the session or discomfort discussing topics generated by participants. Participants were informed that the topic of leading change may bring up uncomfortable feelings and were advised not to share emotionally sensitive information at any time in the sessions. Participants were told that at any time, it felt too uncomfortable, he or she can request a break or voice concern about the direction the facilitation is taking to the researcher. Time was scheduled throughout each workshop for participants to reflect on group processes. Participants were invited to bring up any issues that affect group processes.

Physical. Fatigue may occur as facilitation workshops require considerable time for dialogue and discussion of issues. The three workshops were four hours in duration and three months apart totaling 12 hours. Fifteen-minute breaks were scheduled mid-way through each workshop to provide relief. Each workshop was designed with a variety of activities to get people interacting and moving the entire time the group was together to lessen physical fatigue. Participants were also invited to take a break whenever they needed to in addition to the formal breaks throughout the process to alleviate their fatigue.

Research Sample

A purposive sampling strategy was employed in the search for research participants. This method was chosen as it allows for the "deliberate seeking out of participants with particular characteristics according to the developing analysis and emerging theory (Morse, 2004). *Critical case* sampling was used to target populations experiencing rapid organizational change who are interested in trying out new approaches because they can potentially provide more specific information about the particular challenges associated with the research topic (Creswell, 2007, p. 126). This organization is particularly interested in leading change more effectively during periods of rapid organizational change lending to their ability to purposefully inform the understanding of the research problem (p. 126).

Organizational Context

This study was conducted with a five-year-old contract manufacturing company in the tool and die industry in Central Texas, established in 2011. It specializes in making customized precision parts to customer specifications. Organizational leadership considers itself a customer-focused manufacturing solution provider. Their focus and where they spend much of their time is being as efficient as possible in solving their customers' problems. The organization is very competitive at making difficult parts that require multiple processes, all completed in-house.

Background. A persistent dream to own a family business nudged a family comprised of a husband-wife team and their four adult sons and spouses (eight in total) to investigate a small tool and die company for sale in 2011. The languishing company, with only three employees who had not been paid for two months, faced bankruptcy with

annual revenue of \$250,000. The family consulted and decided to make an offer to buy the business. A deal was negotiated to take over the existing owner's loan and back-pay the employees' wages. As the co-owners pooled their money and closed the deal, the company was born and the dream to own a family business was realized. The eight co-owners have equal shares of ownership in the company.

The challenge of growth. Within the first six months the business had grown to nine employees with revenue reaching one million dollars; a 400% increase. The second year (2012), they discovered that a similar contract manufacturing business located near their company was for sale. They approached the owners and negotiated another deal which expanded the scope of their manufacturing capabilities. At this point the father quit his day job and went to work at the nascent business full time.

This transaction almost tripled the size of their staff of 9 employees to 25 overnight. This acquisition included an oil and gas customer that was continually growing and kept nine people busy full-time on day, night and weekend shifts. The oldest son and CFO stated, "By 2014 we were up to about 30 employees and doing 3.9 million dollars in annual sales. That's the year we won second fastest growing company in Central Texas". Sales grew another thirty percent. Then, in March 2015, the oil and gas customer "turned it off from one day to the next" in response to plummeting oil prices. With the loss of their biggest client, figuring out how to generate new revenue streams became a primary concern.

The challenge of volatile business. Through his consulting work, the father made a connection with a large client in the aerospace industry in 2015. He learned how to become eligible to contract with them as a supplier which required AS9100 Certification.

They diligently got to work putting in place all the structures and processes necessary to get AS9100 Certification. They received approval and as the orders came in, the company's cash flow problems created by the loss of the oil and gas customer were initially alleviated. There was, however, a steep learning curve to writing bids and earning the contract work. The CFO stated, "within the very first job we made a lot of money and then subsequently lost money on several jobs because we were quoting too competitively not understanding their business. The last half of 2015 was a great run-up and at the very end we ran into tough times". Then, unpredictably, a potential customer approached them requesting a very large tooling project. They accepted. The CFO described the beginning of 2016, "January and February of this year were the most stressful and biggest financial loss months we've ever had because our core customers went down but also because this new customer we took on required a lot of our time that we couldn't invoice for. That put a lot of stress on us financially and personally, so this year we are going to focus on sales and profitability".

The challenge of physical layout. The operations are scattered between four different buildings within walking distance of each other. This poses additional challenges with logistics and the flow of product from one building to the next.

Communication and coordination challenges are also exacerbated because the organization is physically structured in silos. The first building houses the functions of tool making, precision parts and machining. The second building contains the fabrication and shipping functions including incoming raw materials and outgoing finished product. The third building houses the larger machining parts and the fourth building accommodates the water jet and assembly rooms.

Today. Leadership now meets on a bi-weekly basis with the sales and engineering people and gives them efficiency and profit-margin goals. In March 2016, the company hit all the gross profit margin goals and reached the second-highest month of sales in their short history. April and May were equally good. June was the most profitable month ever. The CFO continues describing the current situation, "now there is a lot of fine-tuning and because there is a financial stress of growing – and you see this a lot in our meetings – we make a lot of decisions for today and not long term. It's rush rush rush, get your shipping so we can get your invoice and get that cash in 30 days, which is not always the best long-term decision but it's what we have to do". He described the primary longer-term efficiency goal of getting all the operations from four different buildings under one roof. The secondary, shorter-term efficiency goal is getting everybody on board with being efficient through discussion and coordinated action through the workshops of this research study. He stated that the intent and will are there but it has yet to be fully realized. He continued, "I think we also have high expectations. I think we really are the most talented contract manufacturer in Central Texas. We are definitely the most diverse. We can turn around things fast and we have a good reputation so everything is working out. We are just pushing things along and growth is stressful. We have evolved a lot in our four-year history".

Awards. The organization and its leaders have been recognized for several achievements. One of the co-owners received the 2013 *Innovation Award* from the University of Texas at Austin Red McCombs School of Business. They were ranked second in the Austin Business Journal's 2014 Fast 50 as one of the 50 fastest growing companies in Central Texas. They received the *Ethics in Business* award for the small

business category in 2015. The company CFO won the 2016 CFO Award for the small business category.

The company workforce and growth. The CFO talked about the workforce. "We have grown from three employees four years ago to about 55 right now and we need to hire ten more. The median income of people here is \$55,000-60,000 which is a good middle-class income. We have people coming straight out of high school working here. Most of them are machinists and non-college educated. I'm really happy that we are providing those kinds of jobs and doing what we are doing. It's a tough business but the more we understand it and focus on the processes and solving problems for our customers, the more opportunities will come our way. It's not always easy. There are many times where we (the owners) have to put in our own money to prop up cash flow as we grow and take more on. We could just stay stable and sit back but we keep moving forward. We don't want to make the mistake of giving up because we are doing quite well right here".

Participants. The participants in this study were members of the organization coming from one of three organizational functions: owner, administration or production. Initially, 17 people were selected to participate in the study by the HR Manager (a coowner) with the understanding that the project required people from all functional areas of the organization to participate. The breakdown included seven owners, six administrators and four production workers. The participants were selected by ownership based upon: a) their roles and expertise, b) their expressed willingness to participate and c) their breadth of influence within their part of the organization. The four members of the World Class Committee, an elected representation body of the employees, all

participated. They agreed to participate in the study to contribute their ideas and engage in the change initiative. To ensure their understanding of what they were consenting to, I developed a 17-minute You Tube video explaining the project and reading the Informed Consent form found in Appendix E. All participants agreed to be a part of this study.

Owners/senior leaders: sponsors. The two primary contacts who I interacted with in setting up the project included the father who also acts as the General Manager of the entire operation and another owner who is in charge of the Human Resource (HR) function. In this conversation, four initial goals for this project emerged: 1) improve communication, 2) cultivate a sense of ownership among all employees, 3) make the World Class Committee meetings more effective, and 4) build trust and group cohesion. After the initial meeting when we agreed to work together on this project, my primary contact became the HR Manager. Throughout the duration of the study we worked together to communicate and coordinate the study workshops. The other owners include four sons of the founding husband-wife team and two of the sons' wives (eight owners in all). Three of the sons work in the day-to-day business as the CFO & Strategy Officer, Head Engineering Manager and HR Manager. The other son works outside the organization in a related industry, but is still involved in running the company with his family. At the time of this writing, the organization had just purchased a family counseling business and the female founder transitioned to running that full time.

Administration: middle managers. Six people from various administrative/managerial functions within the organization participated in this project including two Engineers, one Purchasing Manager/Document Control, one Quality Manager, one Accountant, and one Order Entry Specialist.

Production workers. Eight people from different areas of production and front-line workers participated in this project including six machinists/fabricators and two shipping/logistics operators.

It is important to note the challenge of consistency of participation throughout this project. The organization was in a period of high growth throughout the duration of the study with ongoing day/night/weekend operations. Each of the workshops was scheduled on a Saturday morning immediately after a full week of work for participants, many of whom continued working on the weekend. Many participants had varying and long hours. Some participants simply had unavoidable obligations. 72% of participants attended two or more workshops. Also noteworthy is the extension of the invitation from owners to include four more production workers after the first workshop. This expanded the number of participants in this study from 17 to 21.

Data Collection Techniques

Qualitative researchers seek to accurately reflect what participants said in an account that resonates with them (Creswell, 2007). To enhance validation, *triangulation* of data was employed in this research by drawing upon multiple sources of data including video-recordings, observations, reflections and interviews. To accurately record the group processes as well as specific comments, ideas and action plans generated in each of the sessions, each workshop was video-recorded. The use of video also allowed the researcher to record a more comprehensive documentation of the LSPS model. A report detailing the outcomes of each workshop was also provided to the participants within one week following the event.

After each workshop, I also reflected upon and recorded analytic memos of my observations, thoughts and feelings about the experiences. Scheduling time immediately following each workshop to do this allowed me to document any surprises, positive deviations, things that did not go to plan, comments and insights from different participants that caught my attention, group interactions that were noteworthy and my own participation. These personal reflections provided the glue pulling the pieces of this research together and gave a voice to intuitions and insights that often remain undocumented. Group reflections were another source of data collected from each workshop. Time was structured to have conversations about the group processes and how they were all working together. This data was recorded by the principal investigator from the flip chart pages and video-recordings and later transcribed. A final source of data was collected through semi-structured, one-on-one interviews with study participants within one week of the final workshop. These interviews were designed to more deeply understand their experiences and insights.

Instruments. The interview protocol was structured with four main research questions to ensure that each part of the broader topic was explored (Rubin & Rubin, 2005). Follow up questions were used throughout the interviews to get more information on interesting responses and unanticipated themes. At times, probes were used to request clarification or to get more detail in their response (p. 137). The interview questions were designed to be quite open initially inviting responses on participant insights and experiences of being a part of this study. Thirteen interviews were conducted face-to-face and two were conducted via phone and recorded. The interview protocol is attached in Appendix B.

Data Analysis

The goal of data analysis is to transform multiple sources of data into findings. This is done in a three-stage process including preparing and organizing the data, finding themes through coding and finally presenting the data in tables and figures (Creswell, 2007, p 148). Qualitative thematic analysis was used to analyze the data in this study through a combination of coding techniques and theming the data. Analysis is defined as "the search for patterns in data and for ideas that help explain why those patterns are there in the first place" (Bernard, 2011 as cited in Saldaña, 2016, p. 10). The three phases of data analysis as they were implemented in this study are now discussed.

Phase One: Preparing and Organizing the Data

The four sources of data generated from the study needed to be recorded in text form including the video recordings of each workshop, participant reflections researcher observations, and participant interviews. The visual piece of the video data was useful in observing participant behaviors and reactions that were not noticed by the researcher as the workshops were conducted. Noteworthy observations from the video recordings were added to the post-workshop analytic memos. Following each workshop, when thoughts, emotions and ideas for improvement were fresh and active, the researcher wrote analytic memos on the experience, and self-reflective memos documenting personal reactions to what had transpired. Participant reflections were a part of the data captured in the video recordings as well as data generated on flipcharts. When the participants broke into smaller groups, those simultaneous discussions could not be recorded, however, the whole group debriefing in which each group was participating in a larger conversation was recorded and able to be transcribed. Each of these data sources was added to the data

corpus for analysis. Workshop summary data, apart from researcher data, was also created and distributed to the participant organization following each workshop. These documentation processes were not discrete steps but instead happened simultaneously throughout the course of the study. Interviews transcripts, analytic memos and workshop transcripts were saved in digital form on a flash drive in separate files and then printed out for manual analysis.

Phase Two: Finding Themes by Condensing Data through Coding

Coding is a cyclical act and dynamic process which may require several passes over the data, recoding as the meaning takes shape. Saldaña describes his preference of "heuristic fluidity" as an essential part of insightful qualitative analytic discovery over "mere mechanistic validity" (2016, p. 9). For first cycle coding, I used In Vivo Coding, Values Coding and Evaluation Coding which takes short words or phrases from the participant's own language; most appropriate in studies that place significant value on the participant's voice (Saldaña, 2016, p. 295). Values Coding was used to examine data that relates to intrapersonal or interpersonal participant experiences. The data itself, most notably in the interviews precipitated the selection of this code as many participants expressed their values relative to attitudes beliefs when talking about ideas, self, others or things. This code is appropriate for studies that explore action and interpersonal experiences (p. 298). Evaluation Coding was used with participant feedback for their evaluation of the processes, program effectiveness, and the outcomes of this study. Second and third cycle coding were employed using *eclectic coding* to develop thematic and conceptual categories from the range of first cycle codes. Eclectic coding is appropriate for studies employing a wide variety of data forms (p. 213). The use of

eclectic coding was the transitional cycle of analysis that assisted in the development of themes which "capture and unify the nature or basis of the experience into a meaningful whole" (DeSantis & Ugarriza, 2000 as cited in Saldaña, 2016, p. 199.)

Cycling through the data was not always a neatly ordered, textbook process.

There were times when I would read something that someone said and I would immediately recall something similar that someone else had said, but couldn't remember who, so I would quickly shuffle through the transcripts looking for the elusive quote.

During subsequent cycles of analysis, I used various colors highlighting similar information related to emerging categories and themes so that I could more quickly identify it in subsequent cycles. This technique proved quite useful in facilitating analysis. I then moved to presenting the data.

Phase Three: Presenting Data in Tables and Figures

This was a relatively simple activity that involved displaying the themes into a findings table for easier reference. The larger representation of data in the form of this manuscript was a more laborious process, itself very cyclical moving in and out of chapters to ensure consistency and integrity in the work. In summary, the spiral of analysis included aspects of data management, reading and re-reading, memoing, describing, reflecting, interpreting and presenting data (Creswell, 2007, p. 173).

Monitoring and Evaluation Protocol

At the first workshop, when all of the participants are gathered together, an overall change initiative will be identified through collaborative dialogue. In each workshop, goals will be identified that emerge from group dialogue and action plans will be developed to make progress towards the collectively agreed-upon overarching goal.

When developing a monitoring and evaluation protocol, it is helpful to take six key steps to effectively monitor the project (World Health Organization, 2014):

Stakeholder consultation and participation. Consultation with stakeholders
throughout the entire implementation process should be a regular occurrence so
that diverse perspectives are considered and integrated while ensuring project
goals and objectives are clear.

The study's workshop design builds in at the beginning of each workshop time to define the purpose of each workshop and reflect upon the implementation phase. Debriefing and collective meaning-making occur throughout each workshop as well as at the conclusion of each workshop. Each of these activities include and engage all participants in identifying issues and collectively shaping next steps moving forward.

2. **Develop the monitoring and evaluation plan.** Translating the participant groups' identified problem and goals into variables that can be measured is one of the tasks in creating a monitoring and evaluation plan. Gaining consensus on two key questions is important: "What do we want to know at the end of the project?" and "What do we expect to change by the end of the project?". These questions will guide decisions about what elements should be monitored and evaluated to assess progress (p. 168).

An overall change initiative will be identified at the first workshop and then as the participants progress through the nine-step problem solving structure, they will collectively decide what actions can realistically be taken and then select elements to monitor and evaluate to gauge progress.

- 3. Determine the monitoring and evaluation methodology. The appropriate methods to collect and analyze data should then be decided upon. This includes deciding if existing data collection methods are sufficient or if new ones need to be developed. It is important to consider resources available such as time and costs in determining the methods to be used. As the group develops an action plan in each workshop, they will determine how the data will be collected and analyzed as a part of this plan.
- 4. **Assign responsibilities for implementation.** When the workshop objectives are identified, the roles and responsibilities for various participants must be clearly defined. Naming specific people to carry out or work in concert with others is a part of the action planning process to be carried out in each workshop.
- 5. **Set targets.** Clearly defining targets must be done in consultation with all stakeholders to have a concrete measure as to whether the project is moving forward as expected. The question to be answered is, "what can realistically be achieved given the resources and operating environment within which we work?" It is a common pitfall of group work to develop action plans that are too ambitious given environmental constraints. Effort will be made to keep the group focused on developing realistic plans.
- 6. Define reporting system, utilization and dissemination of results. It is important to have a system of reporting preliminary findings during strategically-timed user meetings and/or workshops (World Health Organization, 2014, p. 169). Information should solicit feedback that influences decision-making and project improvement. Taking the time to name a system for reporting findings

from action taken between the workshops is critical to ensure the feedback loop. Each workshop begins with a reflection activity where people involved in the implementation share their experiences and insights.

Standards of Quality and Verification

This section discusses the way in which researcher biases could potentially impact the quality and verification of the study from a researcher reflexivity perspective.

Researcher Context

The theoretical foundation of this study based in social constructionism assumes an interpretivist approach to understanding reality. As such, there is no single objective reality, but instead multiple realities exist. That includes this researcher. I bring my own interpretation of what is seen, heard, and what needs to be done based upon my unique set of beliefs, values, knowledge and skills. Merriam (1998) states that "our analysis and interpretation – our study's findings – will reflect the constructs, concepts, language, models and theories that structured the study in the first place (p.48). My belief system strongly informs what I research. Bringing more inclusive, democratic processes into organizations to create workplaces that are more alive and vibrant where human potential is cultivated as innovative solutions are shaped together is always my intent. These personal perspectives have shaped the direction and design of this research. Gilles and Alldred (2008) speak to the taken-for-granted notions of what could be described as progressive research that can go unquestioned because the researchers' good intentions are justification enough. While there are multiple legitimate beneficial reasons to do this research, this bias can also be a liability if I try and impose my agenda on others. It is a

balancing act. I extend an invitation with the intent to create a new experience. I have to step back and let the group choose what's next.

Confirmation bias. The tendency to look for and interpret information that is partial to existing beliefs or expectations (Nickerson R. S., 1998) suggests confirmation bias may be present. I need to be aware of the inclination to confirm my favorable view of liberating structures as a solution. I often see group "dialogue" that looks more like the same few people ping-ponging monologue back and forth. I visualize a solution through my 'liberating-structures-dialogue-will-fix-it' lens, which is not always the solution. To counter this bias, I try to simply pause, be silent and listen more. The group invariably comes up with the solution that is just right for them. It is important to be aware of the tendency towards confirmation bias during the data analysis process. It is foreseeable that I would look for words or information that confirms the positive aspects of this study. I countered this by looking for data that disconfirms my study and documented accordingly.

Non-neutrality. During the facilitation process, I find myself aware that sometimes I make an affirmational comment after someone shares an insight that I agree with. I try to catch myself doing this and remember that it is not my job to confirm or deny ideas. I must leave that up to the group.

Over-correcting. During the facilitation process, I try to show preference to the quieter participants and give them priority in speaking by giving more 'air time'.

Balancing power and voice is beneficial, but all voices need to be heard, including those with group power and status. I have to be careful not to over-correct.

Halo effect. The tendency for positive impressions of a person or group to influence the overall assessment of them is a cognitive bias (Cherry, 2017). After working with this organization and getting to know people personally, I witnessed how the group became more comfortable with the process and how people change positively. It touched me. I walked out of each workshop not exhausted, but with a profound sense of respect for every person and awe at how they were really leaning into something often uncomfortable but they seemed to enjoy learning something different. I have grown to admire them. This has the potential to impact my objectivity in reporting results. When I got to that place of discomfort, I strove to be self-aware and let the data do the talking.

Reliability and Validity

This study views knowledge from a constructionism perspective in which knowledge is socially constructed and can change as mutual understanding changes (Golafshani, 2001). Constructionism recognizes multiple realities. To enhance validity and reliability of diverse and multiple perspectives, gathering data from multiple sources is appropriate (p. 604). Triangulation of data merges data pulled from different sources, in different places, at various times, from different people (Flick, 2004). This study employed video recordings, observations, group reflections and interviews to ensure more valid, reliable and diverse construction of realities. Rubin and Rubin state the credibility of the findings is strengthened if the participants interviewed reflect a variety of perspectives (2005). The participants interviewed in this study spanned the organizational hierarchy and represented cross-functional dimensions of the organization. In addition to this, throughout the study in each of the workshops, the activities were

debriefed collectively as participants engaged in meaning-making conversations which evolved into shared understandings later recorded as data.

Conclusion

This chapter briefly re-introduced the study and provided an overview of principles of designing a qualitative study laying the foundation for an in-depth description of the PAR/cooperative inquiry research design. How the research was implemented in this study was then presented by describing the three formal cycles of cooperative inquiry carried out in this study, each embodying four distinct phases. This flowed to a discussion of the various activities of data collection as implemented in the study; data analysis was presented as it spirals through three phases; researcher reflexivity issues were discussed and the chapter concluded with a discussion of reliability and validity.

Looking ahead, this methodology lays the groundwork for the development of the Liberating Structures Problem Solving (LSPS) facilitation model in chapter four. This additional chapter is included in this manuscript for two primary reasons: 1) to create a real-world application that builds upon the study's theoretical and methodological approaches. 2) to provide a working example and a step-by-step description of the LSPS model in action as participants move through three workshops. The LSPS model and the specific treatment for each of the three workshops are fully described in chapter four.

Chapter 4: The Liberating Structures Problem-Solving Model

Introduction

This chapter serves two purposes: to advance a new model of facilitation using liberating structures merged with nine problem-solving steps and to provide a working example of it in practice as implemented in this study. I created a new group facilitation model developed by merging Lipmanowicz and McCandless' (2013) liberating structures within Dewey's problem-solving framework (1971). This chapter first introduces the genesis of the idea for creating a new model for this study, describes model development, presents the model with supporting ideas from literature and authors who have inspired me and concludes with a step-by-step account of the model in action.

Genesis of the LSPS Model

The idea of doing research with group processes germinated with my first experience with liberating structures. I was attending a talk in 2012 at the Clinton School of Public Service in Little Rock, Arkansas by Dr. Arvind Singhal, Professor of Communication and Director of the Social Justice Initiative at the University of Texas El Paso. This talk, however, didn't feel like a talk at all. Over the course of an hour the attendees became participants in a collective conversation that began with people getting up out of their chairs having face-to-face interaction. After several variations of one-on-one, small group, and whole group dialogue, there was a level of energy sparked by a sense of connectedness and common purpose. Yes, this happened in one hour with strangers and I was hooked. Liberating structures were irresistibly attractive. I could only imagine how powerful these processes could be with people who worked together every day. Through my subsequent exposure to a liberating structures practice, a striking aspect

of liberating structures became clear. Tensions which are normally present in groups are somehow dissolved when liberating structures are used. How is it that these group processes seem to naturally and effortlessly reduce conflict? It was an intriguing question. As I conducted the literature review I discovered a research gap calling for researchers and change practitioners to explore methodologies concentrating on group processes with the goal of creating conditions for learning, adaptability and innovation within the context of larger bureaucratic structures (Uhl-Bien & Marion, 2009). The desire to research something I love and am intensely curious about matched with a real need to explore dialogic methodologies was the impetus to develop a new facilitation model.

In my formal education in Conflict Analysis and Resolution at Nova Southeastern University, I studied theories, cases and methodologies to understand the origins and nature of conflict. I also learned practical approaches in resolving conflict through human dynamics, communication, negotiation, mediation and facilitation classes. When I experienced the power of liberating structures to dissolve tensions and create vibrant energy and forward motion, it became a compelling idea to direct my research towards a facilitation model that drew upon the best of my formal studies and this enticing real world application. On their own, liberating structures are accessible, easy-to-use, novel ways to engage groups of almost any size applicable in most organizational settings. One does not need to be a formally trained facilitator to use these methods. Could liberating structures be framed within a problem-solving structure to help groups tackle real-world problems in meaningful ways? Could this model provide a user-friendly framework to help reduce conflict and create transformational change in organizations? I didn't know

but I wanted to try. This new model populates various liberating structures throughout Dewey's (1971) problem-solving framework. This problem-solving framework was attractive for the model development because Dewey advocated democratic inquiry open to all. He advanced a problem-solving logic in which inquiry should be directed towards experience (Turnbull, 2008). The problem-solving framework serves as a practical and flexible structure that provides overall direction for each workshop in this study. Each activity has a specific purpose and microstructural design to unleash the human potential that is so often overlooked or neglected in conventional approaches to leading change and solving problems. The nine steps include: 1) define the problem, 2) establish criteria for evaluating solutions, 3) identify root causes, 4) generate alternative solutions, 5) evaluate alternative solutions, 6) select the best solutions, 7) develop an action plan, 8) implement the action plan, and 9) evaluate outcomes and the processes (Dewey, 1971). The process of developing the LSPS model is further described.

Development of the LSPS Model

The model is designed with the change practitioner in mind with the purpose of creating an accessible, coherent approach to assisting an organization lead change together within an existing hierarchical organization. The LSPS model is accessible and user-friendly for change practitioners to put into practice leading-edge ideas in leadership and change management, which naturally reduce sources of structural conflict and create space for meaningful and practical collaboration of diverse participants.

Model development requires integrating theory, methods, liberating structures and a problem-solving framework into common principles and practices essential to effective dialogic events. The model must be flexible in its design to respond to organizational

context, yet still have enough structure that incorporates essential elements to achieve desired outcomes. To this end, the LSPS model advances nine core principles and practices that effectively merge the various theories, methods and practices within a flexible framework. The four core principles chosen inform the leadership mindset which, in turn, guide the five core practices. The four core principles are: 1) pursue justice, 2) seek truth, 3) believe in the nobility of everyone, and 4) assume interconnectedness. The five core practices are: 1) create a container for dialogue, 2) address purpose and vision, 3) cultivate unity, 4) build individual capacity, and 5) develop organizational adaptability. The nine problem-solving steps provide the overall direction of the workshops, although the progression of the steps need not be linear. The nine steps include: 1) define the problem, 2) establish criteria for evaluating solutions, 3) identify root causes, 4) generate alternative solutions, 5) evaluate alternative solutions, 6) select the best solutions, 7) develop an action plan, 8) implement the action plan, and 9) evaluate outcomes and the processes (Dewey, 1971). A dialogic event cannot start by jumping into the first step of defining the problem, because it neglects other essential aspects that must be tended to first. Some of these activities which precede defining the problem include creating a safe container for dialogue in which people are able to move about freely engaging in individual and small-group conversations, cultivating unity and personal connection, and establishing collective purpose. The rationale for what was included in the model is described in the section A New Approach: The LSPS Model.

Selecting Liberating Structures

When it is appropriate to move into the problem-solving steps, the change practitioner is able to select from among 33+ liberating structures to carry out the step.

By identifying the goal or purpose of the activity, such as defining the problem, the change practitioner is able to select from among several appropriate liberating structures using the LS Matchmaker tool or the newly-developed LS app, to accomplish the purpose of the activity. For example, steps four, five and six (generate alternative solutions, evaluate alternative solutions, and select the best solution) can all be executed with one liberating structures activity informally called 25 Gets You 10. Not having a clear-cut formula for a specific liberating structure to use in each problem-solving step is in harmony with the spirit of this research that encourages individual creativity and innovative approaches to working collectively and solving problems together, acknowledging there are unlimited way to engage in collaborative work. In this study, each step was carried out with one or more liberating structures, some exactly as instructed and some slightly modified to adapt to specific organizational conditions.

Five Microstructural Elements

Each of the liberating structures includes five microstructural elements essential to the proper execution of the activity. They include: 1) a structuring invitation, 2) arranging space, 3) distributing participation, 4) configuring groups, and 5) sequencing and allocating time. Each of these microstructures introduces tiny shifts in how people meet, plan, decide and relate to one another (Lipmanowicz & McCandless, 2016). A *structuring invitation* is simply the question a change practitioner poses to the group asking for ideas or proposals about the issue (e.g., what opportunities do you see for making progress on this challenge?). *Arranging space* includes ensuring the furniture (if used at all) is mobile to configure the desired interaction (e.g., having small tables for groups of four with notepads to record ideas). *Distributing participation* to enable equal

time and opportunity for all participants in the activity (e.g., *Conversation Café* uses a "talking-stick" to arrange equal speaking time, ensuring everyone who doesn't have the talking stick is listening). *Configuring groups* involves selecting either individual, dyads, triads, quads or whole groups depending upon the specific liberating structure used (e.g., *1-2-4-All* includes individual reflection, dyads, quads and whole group configurations). Finally, sequencing and allocating time provides a tight time-limit to either individual reflection, dyads, triads, quads or whole group configurations (e.g., *Impromptu Networking* allows about two minutes for each person to talk during the exchange).

The LSPS model incorporates nine core principles and practices the change practitioner can draw upon when designing collaborations for any organization. Table 5summarizes the LSPS model (included in its entirety on the next page) followed by a more thorough description.

Table 5

Liberating Structures Problem Solving Model

	Liberating Structures Problem-Solving Model (LSPS)
	Four Core Principles
T	These principles inform the mindset of the enlightened change practitioner
	Align organizational processes with justice (fairness) on three fronts:
D. T.	Distributive justice: Allow fair distribution of organizational resources.
Pursue Justice	Procedural justice: Structure inclusive & fair decision-making processes.
	Interactional justice: Treat employees with dignity and respect.
Seek Truth	Strive to collect full and valid information from a variety of sources to make informed decisions. Include diverse stakeholders in the dialogic processes of discovery, meaning-making and decision-making.
Believe in Nobility	Believe in the innate value of every person and understand it is the organizational structure which must be designed to provide space and opportunities for people to develop higher capabilities and contribute more meaningfully to the organizational mission.
Assume Interconnectedness	Invite full participation of diverse stakeholders to revitalize the organization. Understand reality is co-constructed through the convergence of diverse connections producing richer information, multiple interpretations and a more textured sense of what is happening and what needs to be done.
Create a Container for Dialogue	Arrange physical space to allow flexibility in movement to encourage new and diverse connections Ensure equal distribution of conversational turn-taking. Include one activity that groups similar people together and to create safe psychological space to address difficult or even unspoken issues before addressing with the larger group. Include activities that develop empathy towards others.
Address Purpose and Vision	Create opportunities for people to explore their individual purpose. Encourage people to take responsibility for contributing their unique capabilities to the organizational vision.
Cultivate Unity	Understand unity is not simply the absence of conflict.
	Cultivate unifying conditions through action on two fronts:
	Remove hierarchical structures which are conducive to conflict.
	Introduce new patterns of interaction and communication to foster quality relationships that enhance organizational prosperity.
Build Individual Capacity	Identify, with the group, one capability they would like to develop throughout the workshops commensurate with their work. Design dialogic experiences using liberating structures to develop chosen capabilities. Embed these experiences for individual development of capacities as they world through the problem-solving process.
	emotional intelligence asking for help open-minded inquiry critical thinking active listening skills giving help analytical skills speaking up creative thinking skills problem-solving skills conflict resolution skills collaboration skills
Develop Organizational Adaptability	Systematically schedule cycles of action-reflection-dialogue events where people learn to look back and assess what worked well and what didn't, search for new information from a variety of sources make decisions and take expedient corrective action moving forward.

Liberating Structures Problem Solving Model: A Change Practitioner's Approach

As the world becomes increasingly complex and interconnected, diverse people with very different world views, ideas, cultures and talents meet in the workplace to get important work done together. This new reality presents unprecedented challenges as these vast differences meld together in woefully inadequate organizational structures designed for another era in human history. It is well-researched and understood that rich identity diversity including race, gender, and ethnicity as well as cognitive diversity, meaning differences in how we think, make diverse groups more productive and more innovative (Page, 2012). Tapping into the latent potential such diversity potentially offers, depends upon creating opportunities for diverse connections and interactions (Eagle, Macy, & Claxton, 2010). Conventional organizational structures that assume a predominantly hierarchical form do not allow for diverse connections and interactions. Hierarchically structured organizations use a power-over approach to control what happens within the organization relying upon status, exclusion, policies, expertise, topdown communication, and control of resources to pursue organizational goals. These hierarchical structures create conditions conducive to conflict. Hierarchy quietly and inescapably systematizes win-lose scenarios which erode relationships and trust, exclude people from decisions over their own work, restrain communication and coordination, stifle collaborative problem-solving and creativity, and impede organizational adaptability and efficiency (Cloke, 2001, p. 45).

Conflict can be resolved through a variety of approaches either directly or indirectly. Often, however, the true source of the conflict goes unaddressed because it is a part of the inherited structure and culture that reach far beyond the organization and is a

reflection of societal norms; ubiquitous, unquestioned and ultimately invisible. The purpose underlying the creation of the LSPS model is to indirectly dismantle systemic sources of conflict embedded within the structure of hierarchical organizations by creating an accessible, practical approach to leading change. It intentionally designs time and space for the inclusion of diverse participants, free-flowing communication, collaborative processes that generate increased creativity and innovation, closer human connection and enhanced organizational adaptability. As systemic sources of conflict are removed or greatly reduced, a shift begins to take place in the power dynamics as an organization advances towards a shared leadership practice.

Overview of the Model

The Liberating Structures Problem Solving (LSPS) model designed for this study intentionally structures more democratic, inclusive and participative group processes to create conditions for the emergence of latent human potential, closer human connection, new knowledge, innovation and a fresh way of communicating and interacting as empowered participants lead change together. The LSPS model thoughtfully and intentionally structures equal time among participants sharing and listening to each other, regardless of where an individual is situated within the organizational hierarchy. Power is more evenly distributed as everyone is involved equally in choosing what to address and participates in shaping their work together. The physical space is flexible allowing a variety of ways for people to interact. Every care is made to create a psychologically safe space for people to have one-on-one, small group and whole group conversations about the issues they collectively choose to address. In these ways, the problems with hierarchical organizations are greatly reduced by structuring systemic sources of conflict

out of the processes. As participants work together over time, they practice reflecting collectively, learning from their experiences and developing organizational adaptive capacity moving forward. By changing the simple microstructures of how people relate to one another, the power dynamic shifts, allowing organizations to move towards a shared leadership approach to leading transformational change. It does not happen all at once, but incrementally in a learn-by-doing approach. As people continually engage in these practices, it takes root more deeply and leadership emerges from the group processes. Human connection and trust are built along the way as all are fully empowered in leading change together.

Conventional Structures

We know hierarchy doesn't work well in an environment that demands agility and innovation, yet most organizations are structured hierarchically to some degree.

Organizational macro-structures are easy to see such as buildings, policies and operating processes that either support or constrain our activities (Lipmanowicz & McCandless, 2016). Micro-structural elements, on the other hand, are smaller structures that influence our interactions with other people and are less obvious. Five of the most common conventional microstructures used in organizations are presentations, managed discussions, open discussions, status reports and brainstorming sessions (Lipmanowicz & McCandless, 2013). The LSPS model focuses on mixing up the design of an organization's microstructures, effectively meeting an organization and its leaders exactly where they are on the leadership spectrum in a non-threatening, accessible way; accompanying them on their journey of transformational change towards a shared leadership approach.

Meeting in the Middle

The LSPS model acknowledges the challenges of inherited conventional structures upon people who are simultaneously called upon to create inclusive, participative, innovative, and empowering work environments. The LSPS model is a practical dialogic OD approach to leading change together that makes tiny shifts in the microstructures of how people meet and interact to spark transformational change within a hierarchical organization. As defined by co-developers Henri Lipmanowicz and Keith McCandless, liberating structures are "simple rules that make it easy to include and unleash everyone in shaping the future" (2016).

Leadership Redefined

Traditional conceptions of leadership as traits or behaviors in individuals are being upended as leadership is coming to be understood as a collective practice.

Leadership scholar Joseph Raelin says, "leadership is less about what a person thinks or does and more about what people may accomplish together" (2016). The LSPS model creates the conditions for leadership as a collective practice through dialogic processes versus leadership as a person. As diverse people come together, leadership emerges as a result of both structured and adaptive dialogic processes.

Conventional ideas of leadership hold a linear view of communication as a process of listening and communicating clearly as messages move from one brain to another (Hersted & Gergen, 2013). Hersted and Gergen argue this is a "dead model" and communication is coming to be understood as a process in which our words acquire meaning through a process of ongoing interchange with others (p. 9). If an organization is, as Busche and Marshak posit, an "on-going conversation" (2015), then the change

practitioner is necessarily concerned with creating an environment conducive to productive conversations that enable diverse participants to co-create their shared reality and, together, shape it moving forward. This is a form of shared leadership as a practice, defined in this study as a dialogic approach to change where "equality of participation and even distribution of power stimulate multi-party reflective conversations promoting mutual accountability for collective learning and results" (Mehra, Smith, Dickson & Robertson, 2006; Raelin, 2012; Redmon, 2014).

A New Approach: The LSPS Model

Creating conditions conducive to productive dialogic exchange in which transformational change can emerge is a change practitioner's ultimate objective. The LSPS model is a framework for conducting dialogic events built upon nine guiding principles and practices. Inspiration behind the construction of the LSPS model draws upon multiple sources including principles of Bahá'í consultation, liberating structures, dialogic OD and complexity science.

Bahá'í Origins. Since its inception in the Nineteenth Century, the Bahá'í Faith has attracted a growing number of people who have found a compelling vision of the world within its writings and a source of profound insights into the principles that must guide efforts aimed towards its realization (Bahai.org, 2018). Some of the principles of this world-embracing vision form the core principles of the LSPS model including 1) justice is an indispensable antecedent to genuine unity, 2) truth emerges from a fuller investigation of reality 3) nobility is inherent in every human, and 4) the oneness of humanity is incontrovertible. The Bahá'í community strives to bring these teachings to the level of thought and action in contribution to the betterment of the world (Universal

House of Justice, 2017). Each of these tenets will be further described under the four core principles of the LSPS model.

The impetus behind the creation of the LSPS model came from the two-fold understanding that hierarchy is manifestly insufficient to meet the unprecedented challenges of today's reality and that we are better together. If shared leadership really is what organizations need to survive and thrive into the unknown future, then what does that really look like? How is leadership shared in organizations that are hierarchically structured? Inclusive, participative, collective endeavor is essential to surviving and moving forward, but it won't happen on its own simply because we believe it to be true. If we do try moving towards shared leadership, it doesn't mean we know how to do it very well. It has to be brought into being intentionally and it's going to take some experimentation. The LSPS model is one such way to help an organization make a shift from a hierarchical leadership approach towards a shared leadership approach. The LSPS model is adaptive in its design and can be implemented with any given group who come together to get important work done. A discussion of the four core principles and five core practices and why they were included in the model is now presented.

Four core principles. These four principles of the LSPS model were primarily chosen based upon the central ideas of consultation (which can also be called dialogue), found in the Bahá'í writings. Consultation is the "means by which agreement is to be reached and a collective course of action defined" (Universal House of Justice, 2010). Through consultation, greater awareness is acquired and conjecture is transmuted into certitude. It is further stated that "the purpose of consultation is to show that the views of several individuals are assuredly preferable to one ..." (Bahai Writings, 2018). Central to

the Bahá'í consultative process are the principles of justice, truth, nobility and the oneness of humanity – all ideas embodied in the LSPS model's four core principles now described.

The LSPS model starts with a mindset of four core principles that inform the design of and animate the five practices bringing them to life within the organization. The four core principles are:

- pursue justice
- seek truth
- believe in the inherent nobility of everyone, and
- assume the interconnectedness of everything

Each of the principles are stated as forms of action for the change practitioner because all too often, high ideals and lofty statements get stuck in the realm of words only. The change practitioner uses each of the principles and practices to design collaborations that create inclusive, participative, safe, innovative, and empowering work environments. These are the conditions conducive to productive and meaningful dialogic exchange that have the potential to spark transformational change.

Pursue justice. The first principle that guides behavior is justice. While justice can be envisioned in countless ways, it is important to first understand why justice is essential before tackling how to actually practice justice in an organizational setting. From the Bahá'í writings, it is understood that "justice is vital to the establishment of unity and harmony at all levels of society, as it provides the standard by which individual conduct and collective effort are judged" (Bahai.org, 2018). When an organization relies upon hierarchical structures that use power to unilaterally define who is included in

decision-making, how work is accomplished and how resources are distributed, it is easy to see how unity would be elusive. It is furthermore stated, "there is no justification for continuing to perpetuate structures, rules, and systems that manifestly fail to serve the interests of all peoples" (Universal House of Justice, 2017). The challenge, of course, is putting a lofty and elusive concept such as justice into action in an organizational setting that is structured hierarchically. If there is no justification perpetuating structures, rules and systems that fail to serve the interests of all peoples, then disruption is necessary. Lipmanowicz and McCandless name such disruption "creative destruction" (2013). Disrupting the conventional microstructures of collective effort is a form of creative destruction.

How we implement justice in an organizational setting is now considered. This study adopts the foundational idea of "justice as fairness" from justice scholar John Rawls (1999). If justice is concerned about the well-being of all, then it is also important how all employees perceive fairness in the organization as a whole – a concept called *organizational justice*. The fields of social science and psychology define three aspects of organizational justice including distributive justice, procedural justice and interactional justice (Psychology Research and Reference, 2018). The LSPS model addresses each of these aspects of organizational justice in its design in an effort to serve the interests of all stakeholders.

Distributive justice refers to people's beliefs that they have received a fair amount of work-related outcomes such as pay, recognition, and benefits (Greenberg & Robert, 2008). When people from all levels within the organization come together in pursuit of common goals, the question of how organizational resources are distributed will

inevitably arise. Conversations structured for inclusion of diverse voices enables people to gain a more holistic perspective of what is going on allowing them to work together at their highest intelligence in determining the optimal use of organizational resources.

Procedural justice is concerned with the fairness of the decision process leading to a particular outcome (Leventhal, Kanuza, & Fry, 1980). The LSPS model is intentionally designed to empower all people, giving them voice and choice. The individual is instrumental in designing individual and collective work by participating in conversations that shape the organizational reality. Their voice is heard and it matters. When making decisions about what is important and what to pay attention to, the change practitioner does NOT privilege some voices more than others. They craft microstructures to allow every voice to be heard. A key idea in Bahá'í consultation is once an idea or contribution is voiced, it no longer belongs to the individual and now belongs to the group (Kolstoe, 2001), who democratically choose what to do with it. When this concept is fully understood and practiced, people learn how to let go of pride of authorship as the ideas are merged with others and morph into something no one could have come up with on their own. In this way, as decisions are made collaboratively, accountability is placed upon the entire group and people's ability to engage in effective dialogue gains resiliency and robustness.

Interactional justice refers to the quality of interpersonal treatment received by employees and the fairness of the information used as the basis for making decisions, (Lee H.-R., 2000). One of the most prominent factors in creating the perception of fairness is evidence of trustworthy management and treating employees with dignity, courtesy, sensitivity and respect (Lind & Tyler, 1988). While the LSPS model is designed

to get important work done together, it also constructs into those problem-solving processes opportunities for meaningful human connection in which people forge closer bonds with each other and trust is built along the way (Lipmanowicz & McCandless, 2016).

Although the principle of justice alone compels the inclusion of all stakeholders in the problem-solving and decision-making processes, there is another compelling reason to include all stakeholders. One of the problems with a hierarchical structure is the exclusion of people closest to the problems who are best-equipped to offer real solutions from participating in conversations in which important decisions are made. Diversity is essential for making intelligent decisions. If organizational leadership seeks full and valid information to make informed decisions (Schwarz, 2002), to leave out the very people who have vital first-hand knowledge of and experience with the problems would be remiss. Liberating structures invite the voiceless to the conversation. By including people who represent every part of the organization – even the janitor – the chances of developing innovative, robust and sustainable solutions moving forward are greatly enhanced. The LSPS model assumes that everyone belongs at the table, has something essential to contribute, and invites them to the conversations where participants lead change together. The LSPS model ensures the question is asked, "who needs to be here?" prior to and within the collaboration. In this way, the unheard, the quiet, the people dwelling in the organization's shadows, have space and time to be seen and heard. This helps create conditions for unimagined possibilities to emerge.

Seek truth. The second principle that informs the practice is the continual search for truth. From the Bahá'í writings, consultation "must have for its object the

investigation of truth" ('Abdu'l-Baha, 1982). A primary purpose of collaborative dialogue is to gather diverse people together to unleash the unique perspectives and talents in pursuit of solving complex and often unprecedented challenges. Accurately identifying problems requires having full and valid information from a broad spectrum of perspectives and sources to make such an assessment. The dialogic processes of groups made possible with the LSPS model are intentionally designed to get people talking and listening to each other to make possible a broader understanding of the complex dynamics at play in any worthy pursuit.

The dialogic process can be "understood as the collective investigation of reality" giving "due importance to valid empirical information" while also not raising mere opinion to the status of fact or defining truth as the compromise between opposing interest groups. (Universal House of Justice, 2013). These dialogic processes must also take into account emotions, intuition and abstract thinking (Cloke & Goldsmith, 2002) to gain a greater understanding of the unspoken-yet-very-real nuances that are a significant part of the collective reality. Through inclusive dialogic processes where diverse voices are heard and valued, in which prevailing narratives are challenged and the quest for truth is a constant goal, the collective intelligence of the group has the space and opportunity to emerge.

Believe in the inherent nobility of everyone. The third core principle speaks to the dignity and potential within all people. The Bahá'í writings unequivocally assert the inherent nobility of every human being (Universal House of Justice, 2017). Every human is born with virtue, integrity, honor and goodness. In his book, *Born Good*, Berkeley social psychologist Dacher Keltner researches the new science of positive emotion and

asserts that humans have an innate capacity to engage with others in cooperative communities (2009). Drawing upon the Confucian concept of *Jen*, a complex melding of kindness, humanity and respect that transpires between people, he asserts that we are not, as philosopher Adam Smith asserted in rational choice theory, wired for competition and the perpetual pursuit of personal gratification (p. 9), but instead, new neuroscience suggests we are wired for *jen*. When we cooperate with or serve others, the reward centers of the brain light up (p.6). This evolving understanding of human nature is becoming more broadly accepted by institutions. The Universal Declaration of Human Rights asserts its recognition that "all human beings are born free and equal in dignity and rights" and that they "are endowed with reason and conscience" (United Nations, 2015).

The core principle of inherent nobility, placed within the context of an organizational setting, holds implications for designing a work environment that is developmental. Part of the conventional leadership mindset assumes that some people are more valuable than others which is reified by a hierarchy that constructs inequalities in status, power and access to organizational resources. A shared leadership mindset, on the other hand, views every person as highly valuable in their own unique way, all vital to organizational success. Operating from the principle of believing in the nobility of everyone provides the platform to create an organizational culture and experiences that help people achieve their potential. A theoretical paradigm called the Capabilities Approach, often used within the development and policy world, begins with a simple question, "what are people actually able to do and to be? What real opportunities are available to them?" (Nussbaum, 2011). Through our work lives people must be able to

express honesty, kindness, integrity, trustworthiness, generosity and other qualities of the higher self. Every individual is viewed as noble with latent potentialities that will develop into potent capabilities given the proper environment and opportunities.

This principle of inherent nobility recognizes every person belongs and that perhaps it is the organizational structure which has thwarted someone's ability to contribute meaningfully. The LSPS model is designed with a deep respect for all, giving them the space and opportunities to express virtues, develop higher capabilities and realize their latent potential.

Assume interconnectedness. The principle of interconnectedness draws upon a primary theme of the oneness of humanity within the Bahá'í writings, further supported by complexity science. The concept of the oneness of humanity assumes interconnectedness, a central tenet of Bahá'í philosophy. Collective life suffers when any one segment of humanity thinks of its own well-being in isolation from others. The Universal House of Justice stated "the welfare of any segment of humanity is inextricably bound up with the welfare of the whole" (2017). That "humanity constitutes a single people" is a truth that "claims widespread acceptance today" (Universal House of Justice, 2013). As the collective consciousness of this principle is raised, the need for a complete reconceptualization of the relationships that sustain society become ever more apparent (p. 3). Within the organizational context, recognition that what happens in one part of an organization necessarily impacts other parts of the organization either directly or indirectly necessitates this reconceptualization of relationships and the way in which work is accomplished. However, in a world where conventional organizational structures are pervasive, reimagining relationships and how work is carried out is precarious.

Hierarchical organizations are predominantly designed according to a Newtonian worldview where order, predictability and stability are assumed (Wheatley, 2006) often relying upon linear thinking where A directly causes B. This conventional mindset seeking to control with a power-over approach creates an organizational structure where specialized departments are removed from each other and executives are distanced from lower-level employees. Cultural Anthropologist, journalist and author of *The Silo Effect*, Gillian Tett, describes the organizational phenomena of silos where people are "trapped inside their little specialist departments, social groups, teams, or pockets of knowledge" (2015). These silos arrange distinctions in status and type of work reinforcing the relative isolation of one group from another that leads to tunnel vision and tribalism. Keeping the principle of interconnectedness in mind, when tunnel vision and tribalism are present in one part of the organization, the entire organization is adversely affected. In today's complex and often chaotic world with countless factors influencing each other simultaneously and incessantly, the conventional mindset and hierarchical structure fall perilously short.

A new approach to organizational theories, structure and actions grounded in today's science is needed. Wheatley suggested the world is naturally orderly in which every agent is both unique and interconnected with its environment (2006). Complexity science sheds new light on the true nature of organizations as complex adaptive systems in which complexity arises from the presence of multiple elements that are interrelated in complex ways (Kauffman, 1995). New knowledge originates from new associations (Holman, 2015). Leadership as a collective practice distances itself from the minds and actions of individuals and places it within interdependent and co-constituting

relationships (Gergen & Hersted, 2016) which are most fruitful when multiple participants from different levels of the organization are involved (p. 195). Accordingly, change practitioners must be concerned with creating experiences that include the convergence of diverse people, data and numerous other factors to produce richer information laying the groundwork for multiple interpretations and a more varied and textured sense of what is happening and what needs to be done (Holman, 2015).

The four core principles serve as a guiding constellation in designing group dialogic experiences that include each of the five core practices. The five core practices are:

- Create a container for dialogue
- Address purpose and vision
- Cultivate unity
- Build individual capacity
- Develop organizational adaptability

Five core practices. Drawing upon the core principles in every activity, the change practitioner is concerned with creating conditions in which shared leadership can emerge. The change practitioner must tend to five core practices within every dialogic experience.

Create a container for dialogue. The idea of a "container" is defined as "the intangible yet real spaces in which the potential and possibility of a group can unfold" (Corrigan, 2015). This includes tending to both the physical and psychological space in which dialogue occurs.

Arrange appropriate physical space. The importance of physical space cannot be overstated for emergent dialogue to occur. Lecture halls with all of the seats facing the front of the room or conference rooms with a large table surrounded by chairs define the nature of interactions between participants with a proclivity towards one-to-all communication. These physical settings, silently but powerfully, structure the nature of the relationships between participants and constrain what is possible.

Because there is very little one-to-all communication using liberating structures and most of the conversations are conducted in dyads, triads, quads and small groups, the ability for participants to move around easily in different conversations and activities with diverse people is fundamental to this dialogic process. Other aspects to consider when arranging the physical space include:

- *Furniture*. Moveable chairs and perhaps small tables within open space allows physical mobility of people. Many conversations occur while standing.
- Noise. Potential noise distractions from other nearby groups and air conditioning for example should be considered when arranging space to reduce barriers to communication.
- Wall Space. Sufficient wall space is needed for documentation of key ideas and
 decisions which helps people remember what they've done and what they want to
 do.
- *Lighting*. Natural light enhances the informal atmosphere.
- *Temperature*. A comfortable ambient temperature helps people focus on what they are there to do. An environment that is either too hot or too cold detracts from the experience.

Visual Display. A screen and/or flipcharts are needed for visual displays of LS
instructions which enhance clarity of activities.

Create psychological safety. There are multiple factors that create the psychological environment in which transformational conversations occur. Among those most influential are group norms defined as the "informal rules that groups adopt to regulate and regularize group members' behavior" (Feldman, 1984). These norms are rarely written down or talked about openly, yet have a powerful and persistent influence on group members' behavior (Hackman, 1976).

Researchers in a 2012 study called *Project Aristotle* focused on Google's quest to find the perfect team, identifying group norms as the key influence on productivity. They found two stand-out group behaviors among the most effective teams. First, members spoke in roughly the same proportion, a pattern of group behavior researchers referred to as "equality in distribution of conversational turn-taking" (Duhigg, 2016). When everyone participated in the discussion, the team did well, however, if one person or a small group dominated the conversation, "the collective intelligence declined" (p. 6).

The second component is "social sensitivity" which is a reflection of how well group members are attuned to each other through tone of voice, expressions and non-verbal cues. (p. 7). People on successful teams seem to know when someone is upset or feeling left out. If, for example, someone is looking off and not engaged in a conversation, someone with a high level of social sensitivity might ask, "Emanuel, I noticed you're looking off and quiet. What's happening with you? Why aren't you in this conversation?". This attunement to the feelings and behaviors of others can enhance participants' empathy and gives permission for people to embrace the more human

aspects of group dynamics that powerfully influence how effective groups are.

Demonstrating empathy helps to create a safe space allowing for psychological safety as people come to understand people care about them and value their contributions.

Harvard professor Amy Edmonson spent years researching psychological safety describing it as "a team climate characterized by interpersonal trust and mutual respect in which people are comfortable being themselves" (Edmonson, 1999). Everyone on the team needs to feel like they can speak equally. In a psychologically safe environment, risk-taking is encouraged and mistakes are seen as sources of learning.

Address purpose & vision. Organizations define vision and mission, but often fall short in living up to those statements in the daily work lives of people and becoming a deeper part of organizational culture. Addressing purpose as an ongoing conversation is a critical part of connecting people more deeply to their own purpose and how it ultimately contributes to the larger organizational purpose. Creating space and time to have these critical conversations helps organizations move from a conventional leadership approach that imposes rules and regulations to control others towards a shared leadership approach where people are empowered to draw upon their own sources of motivation.

Margaret Wheatley's complexity research within organizations emphasizes the emergence of order out of seemingly random interactions among individual agents. Every agent is both unique and interconnected with its environment. She notes the deep relationship between individual activity and the whole stating, "even among simple cells, [there is] an unerring recognition of the intent of the system" (2006). This idea of the interconnectedness between the individual agents and the intent of the whole system holds implications for leaders. First, the hierarchical approach of imposing external

controls to manage people has been problematic. In Wheatley's words, "we have created trouble for ourselves by confusing control with order" (2006). The LSPS model upends the idea of imposing external pressure to conform by building within it opportunities for individuals to examine their own sources of motivation by inviting them to take responsibility for contributing their unique capabilities and doing what they love. Holman argues this approach encourages people to pursue what matters deeply to them, enabling their work to become an act of service as they contribute what they love to the betterment of the whole (Holman, 2015). As the conversation evolves, a shift in the power dynamics is made possible. As individuals are encouraged to draw upon their individual purpose and contribute it to the collective purpose of the organization, the power dynamics can shift from external enforcement to internal revitalization. Furthermore, through more meaningful dialogue, richer, more connected relationships can develop and unfold naturally.

Cultivate unity. Unity is not a passive state that simply exists with the absence of conflict. It must be cultivated through persistent action on two organizational fronts; removing structural sources of conflict and introducing new patterns of interaction and communication. First, working to remove structural sources of conflict is essential to ensuring the system's practices live up to its principles. The simple act of convening a gathering of diverse people who all have equal say in identifying issues and shaping their work together is a form of power-sharing that eliminates or greatly reduces structural sources of conflict (ie., one-way communication, silos, pre-defined problem with prescribed solutions). Paying lip service to espoused principles (ie., 'people are our most valuable asset', diversity and inclusion), while excluding stakeholders and using power-

over to diagnose and prescribe to those lower on the hierarchy creates tensions and conflict. Working to bring principles to life in people's daily work strengthens organizational coherence and allows people to trust that the organization means what it says. Bringing people from all parts of the organization together to solve problems collectively is an expression of the four core principles of pursuing justice, seeking truth, believing in nobility, and assuming interconnectedness in action. Striving to advance the three aspects of organizational justice (distributive, procedural, interactional) by including and empowering everyone in big decisions, seeking truth from whatever unlikely source it may appear, seeing the innate value in everyone and recognizing that every action has rippling effects throughout the entire organization are principles translated into practices essential to cultivating unifying conditions. Making space and time for diverse people to engage in participative and inclusive dialogue introduces people to a new practice in identifying issues and solving problems collectively, while simultaneously dismantling systemic sources of conflict. Every activity must be mindful and in alignment with the principles to build and sustain unifying organizational conditions.

New patterns of interaction and communication are introduced to foster quality relationships which are the key to collaborating and getting things done. As Gergen and Hersted point out, "Whether an organization prospers or perishes depends importantly upon the relationships among its participants" (2016). These relationships are primarily dialogic in character. Hierarchical organizations tend to focus on efficiency and productivity enforced by rules and policies while overlooking the relational aspects of work (Cloke & Goldsmith, 2002). Scheduling time and space for diverse personal

interaction fortifies relationships while tackling tough issues. By intentionally structuring one-on-one and small-group interactions, experiences are created that set the stage for people to connect in meaningful ways as they work together to effect change. Liberating structures largely avoid one-to-all communication making every interaction a structured opportunity for diverse personal connection and building trust as people get to know each other better through dialogic processes. Liberating structures are designed to include, engage and listen to diverse perspectives and information. The use of liberating structures cultivates a unifying environment where people are seen, heard and respected (Lipmanowicz & McCandless, 2013).

Build individual capabilities. This research is built upon the premise that leadership occurs as a collective practice rather than from the attributes or behaviors of particular individuals (Raelin, 2016). The question for the change practitioner then becomes how do individuals participate in the practice of emerging leadership and ultimately develop individual capabilities in the process? Gergen and Hersted assert that leadership is an emergent outcome of the ongoing patterns of relationship primarily practiced through dialogue (2016). Working through the problem-solving steps within the dialogic approach of the LSPS model, participants are able to develop a wide array of individual capabilities including but not limited to:

- Critical thinking and analytical skills
- Emotional intelligence; especially empathy and respect
- Principle-centered thinking and decision-making
- Effective communication skills including listening, speaking up, asking for help and giving help.

- Indispensable collaboration skills with diverse people
- Open-minded inquiry
- Essential conflict resolution skills
- Imaginative and creative thinking skills

As people engage in a dialogic practice they inevitably build individual capabilities as they are invited to name challenging issues, address difficult questions, think about paradoxical realities, identify underlying causes, understand diverse perspectives and complexities, listen to others with curiosity and empathy, expand their vision, seriously explore new ideas of what is possible, learn to collaborate on equal footing, make collective decisions, understand their individual role in contributing to the larger organizational mission, and reflect both individually and collectively on their work and group processes.

The key to building these capabilities is actually doing it as opposed to sitting in a classroom learning about it. The limitations of a text-based pedagogy to leadership development become clear when the purpose of leadership development is to improve skills in practice (Gergen & Hersted, 2016). It is therefore essential to be immersed in actual practices that expose participants to opportunities for dialogic relationships. Every liberating structure designs experiences with a specific purpose while concurrently building individual capabilities. Liberating structures are methods of a learn-by-doing approach that assist in the process of enabling individuals to develop greater capabilities through participation. Most people understand a workshop here or there is unlikely to change behavior overnight, however, as liberating structures are used over a period of time with consistent application of a set of principles, many of these moments build up to

a point where evolved practices and mindsets become embodied (Ledwith & Springett, 2010) and transformational change occurs.

Develop organizational adaptability. Being responsive to quickly-changing conditions and resilient when experiencing set-backs is essential in today's hyper-competitive environment. Adaptive firms are more competitive (Long, 2001) and tend to perform better than their peers (Dreyer & Gronhaug, 2004; Tuominen, Rajala, & Moller, 2004). In this study, organizational adaptability refers to an organization's ability to respond quickly to changing conditions within and outside of the organization, by adjusting or modifying its way of thinking, its practices or its course. In other words, an adaptive organization is a learning organization.

An organization's adaptive capacity is enhanced when the needs and demands of various stakeholders are acknowledged (Heifetz & Laurie, 1997). This starts with including diverse stakeholders in dialogic processes in which important conversations occur and decisions are made, however simply including diverse stakeholders is not enough. To learn what is happening in the internal and external environment, the organization needs regularly-scheduled processes designed to gather information from the various stakeholders. The top-down communication flow of a hierarchically-structured organization omits these reflective gatherings resulting in a slower learning process and ultimately slower adaptability.

The LSPS model builds within it regularly scheduled, continuous cycles of action, reflection and dialogue, in which diverse participants can collectively look back at action taken and, through dialogic processes, discover together what worked well and what did not. The LSPS model is designed to gather information from all parts of the organization

in understanding a shared reality and co-creating a path forward. An array of liberating structures is used to design the flow of activities intended to draw out knowledge and insights, expose natural paradoxes of complex situations and provide the opportunity for collective exploration of new and creative ideas moving forward. Quick cycles of action, reflection and dialogue with an experimental mindset that views failure as a natural part of the learning process, build organizational adaptive capacity. Figure 5 represents a graphic representation of the LSPS model in its entirety on the next page.

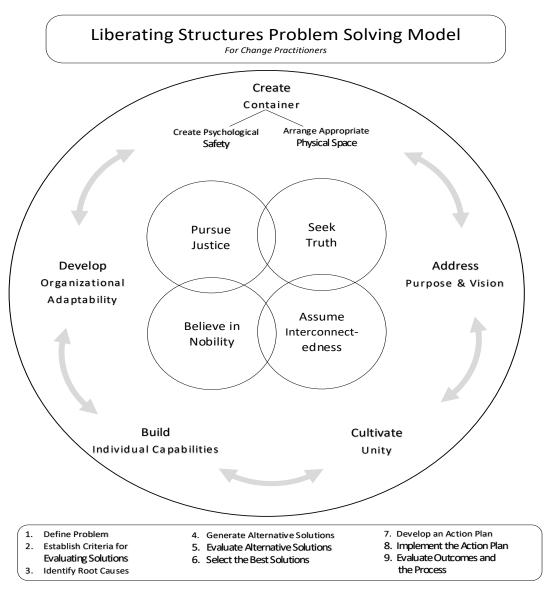


Figure 5. Graphic of LSPS Model

The LSPS Model in Practice

The LSPS Model as it was carried out in this study is now presented. Each workshop was carefully designed to incorporate each aspect of the LSPS model while guiding the participants through the problem-solving steps. A description of the activity and its purpose followed by participant quotes and researcher commentary follows.

Workshop One

Table 6

Workshop One Agenda

WORKSHOP ONE AGENDA		
Saturday, April 2 nd , 2016		
8:00 am – 12:00 Noon		
8:00-8:15	I.	Welcome and Introductions (Impromptu Networking) [15 minutes]
8:15-8:45	II.	Learning About the Company and the Study [30 minutes]
		(Celebrity Interview & User Experience Fish Bowl)
		a. Current Challenges & Opportunities – Views from three levels
		b. Brief Overview of Research Project
		c. Purpose and Goals of Research
		d. Participant Roles and Principle Investigator Role
8:45-9:15	III.	Make the Purpose of Our Work Together Clear (Nine Why's) [30
		minutes]
9:15-10:00	IV.	Identifying the Change Initiative (STEPS 2 & 1): 1-2-4-All & Multi-Dot
		Voting [45 minutes]
10:00-10:15	V.	Break
10:15-10:45	VI.	Making Space for Innovation (STEP 3): TRIZ & 1-2-4-All [30 minutes]
10:45-11:15	VII.	Generate, Evaluation & Select the Best Ideas 25 Gets You 10 (STEPS 4,
		5 & 6) [30 minutes]
11:15-11:45	VIII.	Action Plan (STEP 7): 15% Solutions [30 minutes]
11:45-12:00	IX.	Reflection on Group Processes: What? So What? Now What? with 1-4-
		All

Activity and its Purpose: Welcome and Introductions

As this research group came together for the first time, setting the proper tone for the project included a brief welcome and then moving immediately to the first Liberating Structure activity called *Impromptu Networking*, which introduced the way in which we would be interacting throughout the entire study. Lipmanowicz and McCandless suggest

a productive pattern of engagement is established if used at the beginning of a working session as loose yet powerful connections are formed in 20 minutes by asking engaging questions (2016). As people interact immediately an energy and positive tone are established for the entire event. Thoughtful invitations (questions posed to group) attract stronger engagement around challenges and stories often deepen as they are repeated. Through these brief interactions, current patterns in the ongoing construction of reality are disrupted and new social connections are formed (Bushe & Marshak, 2015). This activity arranged people having face-to-face, meaningful conversations with those who they didn't normally work with and jump-started the day with activity and new patterns of interaction and communication. This was the first structured conversation to generate new relationships and the beginning of a collectively-constructed reality (Bushe & Marshak, 2015).

Participants were welcomed and then we moved immediately to the first LS called *Impromptu Networking* in which the participants paired up with the person whom they knew the least. They talked with each other answering the question posed by the facilitator. In pairs, each person had 90 seconds to speak. The facilitator rang the ting-sha bells to mark time and indicate partner-switches. Three rounds with this question were conducted allowing each person to share and listen to three different people. The content of these exchanges was not shared with the larger group.

The study manipulated five microstructures of how people communication and interact. The five structural elements in every activity included a structuring invitation; arrangement of space and materials; distribution of participation; group configuration and sequence, and timing of steps (Lipmanowicz & McCandless, Introduction, 2016).

How the five micro-structural elements were arranged:

- 1. Structuring invitation. "You are all here giving half of your Saturday, and I am so appreciative. I know there are many other things you could be doing and I want to make this worth your time. So, think about this question, 'What would you like to accomplish today or begin to address that will make this worth your time?'.

 You can state it as a hope or an expectation for our time together. I'm going to give you a minute to reflect on that silently, write it down on your notepad if you wish, then, on my signal, you will find a person whom you know the least to share your ideas. One person will speak first for 90 seconds then I'll say switch and the other will speak for 90 seconds. When I ring the bells, you will find another partner and do the same thing again. We will do three rounds so you will be speaking with three different people. Any questions? Go."
- 2. *How space is arranged and materials needed.* Open space was needed without obstructions like tables or fixed chairs so participants could stand in pairs and move around easily to find partners.
- 3. *How participation is distributed.* The participants interacted simultaneously within the same amount of time. Everyone had an equal opportunity to engage.
- 4. *Group configuration*. People formed dyads and were invited to find the people whom they knew the least.
- 5. *Sequence of steps and time allocation*. Each person was given 90 seconds to share their insights in each of the three rounds (four minutes per round). Time was marked by the facilitator with ting-sha bells.

We then moved to a reflection and sharing activity.

Activity and its Purpose: Learning About the Company and the Study

After the Impromptu Networking activity that served as a more substantive and meaningful icebreaker, we moved to an activity that combined learning about the research project and learning about different parts of the organization. At the beginning of every meeting it is essential to start with a clear purpose (Lipmanowicz and McCandless, 2013) and ensure everyone has clarity about why they are there and what they want to accomplish. Conventional structures would normally include a presentation and status reports delivered in a one-to-all structure. I chose to combine two Liberating Structures, Celebrity Interview and User Experience Fishbowl to start sharing information that helped to reveal realities in different parts of the organization and the purpose of the study. Through these blended Liberating Structures diverse participants engaged in conversation in an inner circle surrounded by an outer circle of people whose job it was to listen to the conversation. Designing the activity this way serves several purposes. This structure avoids boring lectures and presentations by allowing participants to engage in a conversation that takes a "talk show" format where participants ask questions and listen to and respond to others. A well-designed interview has the potential to draw out personal narratives that reveal valuable knowledge that can shed light on a full range of rational, emotional, and ethical/moral dynamics at play (Lipmanowicz & McCandless, Introduction, 2016). These structures enable a large group of people to connect with a leader or an expert as a person and grasp the nuances of how that person is approaching a challenge lending substance and depth to the topic.

How the five micro-structural elements were arranged:

1. *Structuring invitation*. Representatives from three organizational levels including owner, administration and production were invited into the center of the circle to join in a "talk show" format conversation. The other group members were invited to listen with curiosity and write down questions with cohorts. The questions posed to each person by the facilitator were:

"What are some challenges you are facing because of rapid growth?"

"What are some accomplishments you are most proud of?"

The questions posed to the facilitator by the organizational representatives were:

"What is this project about?

"What are the goals for this research?"

"What is your role? What is our role?"

- 2. *How space is arranged and materials needed.* Four chairs were placed in a small circle to include organization representatives from the three levels (owner, administrator, front line) with the facilitator. The remaining participants arranged their chairs in an outer circle and observed the inner circle interactions. Each person was provided with a notepad and pen to make notes.
- 3. *How participation is distributed.* In part one of the interview process, everyone had an equal opportunity to listen to company representatives and the facilitator answer questions. In part two, the conversation was enlarged to include the outer circle members who contributed questions and comments about what they heard, deepening the collective conversation.

- 4. *How groups are configured.* The whole group was included and had a specific role with the interviews and the follow up Q & A.
- 5. Sequence of steps and time allocation. The topic was introduced by the facilitator and information was provided on how to arrange themselves for the activity (three minutes). The interviews proceeded (15 minutes) and it was opened to the whole group for questions and comments (10 minutes). The facilitator transitioned the conversation into the next activity (one minute).

I started this activity by explaining to the group that the inner circle participants would be having a conversation about the successes and challenges from different places in the organization as well as the research project. The outer circle was invited to listen with deep curiosity and to make notes of questions that arose which they could ask when it was later opened to them.

Each participant was asked to describe an accomplishment they were most proud of at work. Next, I asked them to describe a challenge they face in their work.

Throughout the conversation, I asked clarifying questions as all the information in this industry was relatively new to me. The conversation transitioned to them being the interviewers who asked me questions about the research project. I had written a list of questions down that they could use in the conversation to ensure important aspects of the project were covered. The discussion was then opened to the participants to ask any questions or make comments. This activity took about 40 minutes. A summary of the conversation follows.

Facilitator: "I toured your facilities yesterday and it struck me that you have grown so much in only four years of launching this organization. That kind of growth

presents big challenges. What are some challenges you are facing because of rapid growth?"

Administrator: "As the company grows the duties expand with it along with the personnel. The transition presents challenges as well as then defining what the goals are".

Production Worker: "A little more basic is we have the machinery spread out in all the buildings and the tooling just spread out everywhere. We take parts from one building to another and they come back here for a process and it just seems like a rat-race around here. Just parts and tooling and personnel spread out everywhere".

Owner: "What I find is challenging is the up-and-down of the industry and having to experience that when we are not getting any quotes. January and February were really low and look at us now. So we have to make quick decisions. We have people who depend on a paycheck and it's really daunting".

Facilitator: "What are some accomplishments you are most proud of?"

Production Worker: "The parts they bring you, we have to be able to figure out how we are going to make them and get the tooling and everything we need, then get them out on time, in such a short span of time. A lot of times we take a part we have no idea that's even coming to the shop. We have no tooling. No heads-up. And that deadline is still there. It does make you proud when you can actually get these parts out on time".

Administrator: "Ditto that. I'm new to this industry so every part we make is new to me, but some of these parts are new to the company also and it's the first time we've made them. It's such a dynamic team. It's a company full of masters that can handle whatever comes to them. I'm amazed at some of the stuff that comes through and some

of us are like, no we can't do that, but others are like, yeah we can. And we get it done and we do it well and we do it on time".

Owner: "In that up-and-down, I am so proud of everybody. I know I feel pressure, but everyone feels pressure in their own ways. And the kind of problem solving that goes on and just kind of witnessing these ideas: let's try this! What about this?... to me it's just the most creative process and who knew? I didn't know that".

The questioning then transitioned to the research project.

Production Worker: "What is this project about?"

Facilitator: "It's about experimenting with new patterns of communication and interaction in a learn-by-doing approach. It's about jumping in and experiencing first-hand participatory, inclusive group processes that tap into the collective intelligence of the group with the hope that you and your organization can experience some kind of transformational change in the way you normally operate".

Administrator: "What are your goals for this research?"

Facilitator: "My three goals for your organization are that you learn and practice some new ways of communicating that will help you accomplish important work together; you strengthen your relationships with each other; and you become more adaptive as an organization. My personal goals are to fulfill the requirements for my dissertation research; to create a space where you can learn from each other and collaborate on finding new ways to lead change together; and to learn from all of you how to improve this process and the facilitation model".

Owner: "What's your role?"

Facilitator: "My role is to guide you through the processes within very tight time frames so you can lead change together more effectively. My goal is to create conditions for the emergence of new knowledge, creative thinking, innovation and whatever else presents itself. The brilliance in this room is widely distributed and I'm trying to create an environment where that has the space to come out. This is about sharing leadership and developing adaptive capacity. Your role is to let your hair down and have fun. Give the processes a chance and engage. Be honest with me about what worked for you and what didn't. Then I get to adapt the model and how I facilitate moving forward".

The conversation was then opened to the larger group who made comments about their work and the organization as well as asking further questions about the research. We then moved on to an activity designed to address personal purpose.

Activity and its Purpose: Make the Purpose of Our Work Together Clear

While the purpose of the study and the workshop had been clarified, it was important to help people remember together why they do the work they do. Digging deeper into the why's helps clarify personal purpose which has the potential to be connected to a larger emerging organizational purpose that may initially be unclear. Visions and values naturally come up in these conversations, which have a much greater power to motivate individual initiative than rules and procedures (Holman, 2015). As a group discovers a shared purpose, more freedom and more responsibility are unleashed (Lipmanowicz & McCandless, 2013). I selected the liberating structure *Nine Whys* for this activity.

How the five micro-structural elements were arranged:

- 1. Structuring invitation. I told the group that they were now going to have a conversation with another person and to "think about what you do at work and briefly describe it to your partner. The partner will ask 'why is that important to you?' Have a natural conversation and ask the whys as you go. The idea is to dig a little deeper into the core reasons for why you do what you do. The first person will be the interviewee and answer questions from the interviewer for five minutes. Then you'll switch roles. I'll signal the time to switch and give further instructions". They were instructed to again, find the person whom they knew the least. After each pair had time to speak and listen, I instructed them, "now get with another pair in groups of four and you will each have one minute to share your experience and insights with your group. Choose someone to give a one-minute summary to the larger group of any themes that may have emerged".
- 2. *How space is arranged and materials needed.* This activity can be conducted with an unlimited number of groups. Chairs were needed for people to sit comfortably face-to-face.
- 3. *How participation is distributed.* Each person had an equal opportunity to participate and speak.
- 4. *How groups are configured.* This activity began with one-on-one interaction, then transitioned to groups of four and then to the whole group (2-4-All).
- 5. *Sequence of steps and time allocation*. Each person interviewed their partner for five minutes and then they switched roles for another five minutes. The interviewer listened with the intention to deeply understand the other and at the

appropriate time asked, "why is that important to you?". Each pair found another pair to share insights in quads for another five minutes. Each group was then invited to share with the whole group any common themes or insights with the larger group for another five minutes.

Content: The ideas were written on flip charts and were condensed to two main reasons why their work was important:

- Bringing order to the workplace enhances happiness and well-being.
- Developing human potential contributes to self-fulfillment.

Up to this point in the first workshop, the first activity involved unlikely pairs talking to each other about personally meaningful issues related to work. The second activity involved the exploration of personal purpose. Although the initial conversation did not evolve to the larger organizational purpose, it provided an introduction to what should be an ongoing conversation within organizations and paved the way for addressing purpose again in the third workshop. The first two activities created a disruption to normal group practices and helped participants become acclimated to the high degree of participatory and interactive group processes that launched new conversations among people who sometimes rarely spoke to each other.

The next activity involved beginning the problem-solving process.

Activity and Its Purpose: Selecting a Change Initiative (Steps 1, 2 & 3)

After creating space for personal connection, learning about the study, hearing from different levels in the organization and having conversations about the things that make their work meaningful, it was time to identify a change initiative to launch. We then proceeded through the first three steps of Ury and Fisher's nine step problem solving

structure, define the problem; envision desired outcomes; and identify root causes. A group is able to determine the problem by "identifying the gap between some desired situation and the current situation" (Schwarz, 2002). The liberating structure selected for this activity was 1-2-4-All. Lipmanowicz and McCandless' first leadership principle is to include and unleash everyone (2013). 1-2-4-All engages everyone simultaneously in the development of ideas, suggestions and questions. This structure is simple and efficient at tapping into every person's ideas and quickly surfacing widely distributed know-how. When the ideas are generated from the participants, buy-in strategies become unnecessary and implementation is simplified (Lipmanowicz & McCandless, 2013). 1-2-4-All structures opportunities for individual expression and connection, one of the three activities described by Holman needed to create conditions for emergence (2015). This structure is also useful in diminishing power differentials as every voice is heard. It helps leaders and followers avoid the trap of over-helping and dependency (Lipmanowicz & McCandless, 2013).

How the five micro-structural elements were arranged:

1. Structuring invitation. I mentioned to the group that it was important to get input from everyone before selecting a change initiative to ensure they were working on the right things. I invited the group to reflect on this invitation: "Think of one challenge that, if resolved, would make the biggest impact improving your work-life. Take a minute to quietly reflect and then write your thoughts on your notepad". After about a minute I said, "now find a partner who you do not work with on a daily basis and share your responses with each other". After about three minutes I rang the ting-sha bells and instructed

- them to "find another pair and you will have one minute each to share your thoughts with the group. Choose a spokesperson who will summarize any themes you identified to the entire group".
- 2. *How space is arranged and materials needed.* Some participants moved their chairs to another person and some stood and found another person to share their insights. Chairs and notepads were used in this activity. Each person in the group was included and had an equal chance to contribute.
- 3. *How participation is distributed.* All participants are included and have an equal opportunity to participate.
- 4. *How groups are configured.* Participants worked alone, face-to-face in pairs and in quads.
- 5. Sequence of steps and time allocation. Space was made for silent self-reflection by individuals on their selected challenge for 60 seconds. Ideas were then shared in pairs for two minutes, building upon ideas from self-reflection. The pairs shared and developed ideas in quads for four minutes. Finally, each group responded to the question, "What is one idea that stood out in your conversation?" The spokesperson from each group shared one important idea with the entire group for about five minutes. The main ideas were captured on a flipchart.

After the first round of *1-2-4-All*, the group ideas were posted on a flip chart.

Each person was then given two dots to vote on their top two change initiatives they would like to see enacted. It is important to note that we did not have a discussion about how decisions were going to be made. Conventional approaches favor those in leadership

positions making the decisions, but without a conversation, we simply used the dots which eliminated privileged decision making by a few and put the power equally in the hands of everyone. People voted with their dots and selected *Surf the Wave: Being Responsive and Adaptive in a Volatile Business Environment* as their change initiative to work on over the course of the research project. Below is a replication of the flipchart with its votes. Step two, establishing criteria for evaluating solutions, was established in this activity by envisioning a desired outcome.

Flip Chart Possible Initiatives Make World Class Committee more effective • • Build a greater sense of ownership & commitment, greater sense of personal pride • • • • • • Improve Communication, more effective, honest communication • • • • • • Strengthen Relationships • • • • Establish & Improve Procedures • • • • • Surf the Wave – Being Responsive & Adaptive in a Volatile Business Environment • • • • • • • Understand the Business Better • • • • • •

Figure 6. Flip Chart: Possible Initiatives

It is interesting to note that this change initiative represents a positive future vision of what the organization would like to become and does not focus exclusively on what is wrong. Bushe and Marshak identify as one of the three core processes of transformational change the emergence of a generative image (2015). The image of surfing the wave came from a production worker which the larger group found attractive and compelling. I then asked the group, "what is the single biggest thing that prevents you from surfing the wave and being adaptable?" to identify a problem (step 1). A modified 1-4-All was used to structure this activity. The participants identified the primary obstacle to being adaptable was creating unnecessary friction/inertia that causes greater expenditure/depletion of resources including time, money and energy. This activity defined the general problem.

Participants then took a 15-minute break. As we reconvened, we addressed tackling difficult issues in an unconventional way. This activity also served to dig a little deeper into root causes (step 3).

Activity and Its Purpose: Making Space for Innovation

After the main challenges were identified, I selected a liberating structure called TRIZ which helps groups identify attitudes, behaviors and practices that are counterproductive to their change initiative. As organizations work to adopt change initiatives, space needs to be cleared for innovation. Helping a group let go of counterproductive activities that limit its success can be tricky as many attitudes, behaviors and practices are deeply embedded in organizational life. TRIZ allows participants to talk about what Schwarz describes as "undiscussables" (2002). These undiscussable issues, however, are very real and cannot be ignored, so it is important to find a way to surface them. In a fun and often wild liberating structure, TRIZ makes it possible to talk about taboo issues by using fun and non-threatening invitations. Through this activity, participants can identify unproductive practices which they are invited to stop doing; something Lipmanowicz and McCandless describe as creative destruction (2013). Stacey describes paradox and creative destruction as an essential part of creating order; that immanently messy dialogue requires emotion, imagination, difference and conflict (1991). TRIZ creates a safe and lively way to engage in messy dialogue that leads to identifying current practices to eliminate that exacerbate the problem. This activity was designed to look at and talk about some of the root causes to the problem which is the third step of the problem-solving structure. When the activity was complete, the group had a concrete list of "Stop Doing" activities.

How the five micro-structural elements were arranged:

- 1. Structuring invitation. In this three-part process I asked, "Many of you are engineers and fabricators so I'd like you to use your very best design skills for this next activity. Your job is to design a work environment that will sabotage organizational adaptability".
 - a. Part One: "First, silently, make a list of all you can do to make sure you run your organization into the ground. Design an organization that is unresponsive, rigid and clueless to any kind of change. Go wild with it, have fun. After two minutes, share your lists with a new group of five and come up with a group list".
 - b. Part Two: "Now, look over your group list item-by-item and ask yourselves, 'Is there anything that we are currently doing that in any way, even slightly resembles this item?' Be brutally honest and make another list of all your counterproductive attitudes/behaviors/practices".
 - c. Part Three: "Okay, last step. Look at your items on your second list and select one thing you are willing to stop doing and the first action step required to stop doing it. Write it down and select a representative to share with the whole group".
- How space is arranged and materials needed. Participants self-selected into new groups of five to six people. They moved their chairs into three small groups.
 Notepads were needed for recording lists.
- 3. *How participation is distributed.* Each person was included and had an equal chance to contribute.

- 4. *How groups are configured.* Each group had five to six people.
- 5. Sequence of steps and time allocation. After introducing the activity, there were three rounds, ten minutes each. The groups collaborated to identify unproductive attitudes, behaviors and practices (five minutes). Each group used 1-4-All in each part of the process: Part One: make the first list (10 minutes); Part Two: Make the second list of what they are currently doing that is sabotaging adaptability (10 minutes), and Part Three: Identify the first step they will take to stop doing their unwanted activity (10 minutes).

Table 7

TRIZ Activity Flip Chart Content

Group	Big List of STOP DOING	One Selected STOP DOING + first Action Step to Make that Happen	
Group #1	 Stop not having clear instructions for tooling Stop not returning tooling when finished. Stop procrastinating. Stop violating router plans. Stop putting off preventative maintenance. 	Stop allowing procedures to go unchecked. First Action Step: Implement a routine meeting (workshop) to ensure procedures are understood and followed.	
	• Stop changing things that work (ex: when scrap bins are emptied, they are put in different places so people don't know where to find them).		
Group #2	 Stop allowing procedure violations to go unchecked Stop taking shortcuts Stop entering bad data into E2 Stop being messy Stop wasting time (smoke breaks & walking slowly) Stop not listening completely to someone who is upset 	First Action Step: Analyze the problems areas and develop full departmental ownership It's a continual process from front office to HR to Engineering to Quality to Production. End-to-end process.	
Group #3	 Stop ignoring instructions Stop over-exceeding budgets Stop waiting for someone to answer a question Stop checking everything 100 times Stop losing data (didn't quite hear this one) Stop overthinking small problems Stop closing my mind to other possibly better ideas Stop making parts without cards Stop making exceptions Stop passing responsibilities Stop 'living with mama' Stop signing cards without proofreading 	Stop violating router plans. First Action Steps: 1. Identify a place for traveler at each work station that's clearly identified. 2. Constant reinforcement	

This activity identified some things to stop doing that were slowing down the organization. The next activity efficiently covered the next three steps in the problem solving structure.

Activity and Its Purpose: Generate, Evaluate and Select the Best Solutions

With numerous ideas circulating among participants, the workshop needed to flow into steps four, five and six of the problem-solving structure; generating alternative solutions, evaluating alternative solutions, and selecting the best solution. The liberating structure I chose for these steps was 25/10 Crowdsourcing, also known as 25 Gets You 10. This microstructure is designed to get a large amount of work done in generating bold ideas from everyone and sorting out the most powerful ideas quickly. This is another structure that contributes to creating a container where diversity and possibility-oriented questions help to establish conditions for emergence (Holman, 2015). 25 Gets You 10 quickly taps into individual sources of wisdom while sparking synergy among diverse ideas that builds coherence (Lipmanowicz & McCandless, 2013). One of the eight key premises of the dialogic OD mindset is structuring participative inquiry and engagement to increase differentiation before seeking coherence (Bushe and Marshak, 2015). 25 Gets You 10 amplifies diversity of thought by structuring time for individuals to silently contemplate and tap into their creative intelligence in proposing a bold solution to address the challenge.

How the five micro-structural elements were arranged:

1. Structuring invitation. "Now we are going to generate some creative ideas about how to address this change initiative of Surfing the Wave. I will hand you some index cards and you will write down your ideas, one per card. So, think of your

very best, most attractive idea that will work towards addressing this change initiative. Take a few minutes to imagine a possible solution and write your idea(s) down. If you have more than one idea, use another card. Please write legibly. Any questions? Go".

- 2. How space is arranged and materials needed. The chairs needed to be moved to the edges of the room so that there was open space for people to walk around.
 Each person was given index cards and pens to write down their ideas.
- 3. *How participation is distributed.* Each person was included and participated at the same time. Everyone had an equal opportunity to contribute.
- 4. *How groups are configured*. Participants reflected individually and silently to generate ideas to write on index cards. Everyone was standing for this activity in order to walk around freely to exchange cards with each other. The cards were scored individually as the group stood in a large circle. In the whole group the highest-ranked cards were shared.
- 5. Sequence of steps and time allocation. I explained the first part of the process.

 First, every participant wrote on an index card his or her best, most attractive idea to address surfing the wave (three minutes). When everyone was finished, they walked around and randomly exchanged cards without reading them so the cards got lost from their authors (one minute). I rang the ting-sha bells and instructed people to stop passing cards, form a large circle and to read the cards silently in their hands. They were then asked to individually rate the idea on that card with a score of one to five (one for not-so-great-idea and five for super-fab-idea) and write the score on the back of the card. I instructed them to pass the card to the

right only when I said 'switch' and rate that card in the same manner as the first. We completed five rounds of this scoring process. At the end of round five, participants added the five scores on the back of the last card they were holding (10 minutes). Finally, the ideas with the top ten scores were identified by conducting a countdown starting with, 'does anyone have a card with a score of 25?'. Highest scoring ideas were read aloud by the participant holding the card which was posted on a flipchart with its score written above it (10 minutes). The flip chart generated from this activity is displayed in its entirety in Table 8 on the next page.

Table 8

25 Gets You 10 Flip Chart Content

25 Cote	Von 10			
25 Gets You 10				
Top Ten Ideas for Surfing the Wave:				
Building Organizational Responsiveness and Adaptability in Volatility				
25	20			
Forecast workload to maximize machine time	Frequent check-ins about priorities –			
and minimize overtime.	eliminate pileup perception that drives			
	perceived need to rush.			
23	19			
Constant training (pressure) to follow routers	Generate a pool of customers to ensure there			
and make sure they are followed!	is constant work. Identify and increase some			
	customers with standardized needs to enhance			
	steady cash flows.			
21	18			
All offer solutions instead of problems when	A place for everything and everything in its			
uncertainty occurs in our procedures. Bring 2	place.			
possible solutions each time.				
21	18			
Succinctly document procedures.	Do studies of national trends to find where the			
	industry is and what disciplines are trending.			
	Oil & Gas, Aerospace, and such.			
20	18			
20 Cross-train to have additional people to	18 Cross-training: Be able to move personnel			
-				
Cross-train to have additional people to	Cross-training: Be able to move personnel			

Activity and Its Purpose: Develop an Action Plan

The group was then asked to gather around the flip chart and look at the results. I asked them to sort the cards into themes as some of the ideas were very similar. A few people stepped up and moved cards and labeled three categories, planning; procedures; and cross-training. The participants then voted with two dots each, on the two initiatives they would like to work on for the next three months. The areas they chose to work on were planning and procedures. Table 9 depicts the organizing ideas which lead towards the creation of an action plan.

Table 9

Organizing Ideas Towards Action Plan Flip Chart Content

Planning	Procedures	Cross-Training
Forecast workload to	Frequent check-ins about	Cross-train to have additional
maximize machine time and	priorities – eliminate pileup	people to handle peaks of
minimize overtime (25)	perception that drives	work with education and
	perceived need to rush (20)	training of the importance
		and need to be able to Surf
		the Wave. (20)
Do studies of national trends	A place for everything and	Cross-training: Be able to
to find where the industry is	everything in its place (18)	move personnel from one
and what disciplines are		department to current
trending. Oil & Gas,		department of need.
Aerospace, and such (18)		Forecasting the Wave. (18)
Generate a pool of customers	Constant training (pressure)	
to ensure there is constant	to follow routers and make	
work. Identify and increase	sure they are followed! (23)	
some customers with		
standardized needs to enhance		
steady cash flows (19)		
	Succinctly document	
	procedures (21)	
	All offer solutions instead of	
	problems when uncertainty	
	occurs in our procedures.	
	Bring 2 possible solutions	
	each time (21)	

As the group stood back in a larger circle people started talking about what to do next. I allowed the conversation to continue because it was a meaning-making conversation. After a few people had spoken, two of the owners said, "Do any of the quiet folks have any opinions or ideas that haven't been stated yet?". I was particularly struck by this statement for two reasons. First, it validated the premise of this project which is to increase participation and engagement through carefully designed microstructures, so when those microstructures were absent for a few minutes in a large group discussion, the prominent voices were heard while the quiet voices were not. The second and most important reason this statement was significant is that two of the owners stepped up to raise awareness of the group processes which contributed to creating an inviting and safe space for honest and open dialogue from everyone. This also contributed to normalizing talking about process in addition to content. Liberating structures, by design, are developmental. It was encouraging to witness other people tending to group process as they collectively addressed their challenges. Some highlights of the dialogue that ensued, organized by topic follow, which led to the creation of an action plan.

The group still needed to make sense of what they had learned and what they were going to do. It was in this moment that I made the choice to structure more time for the group to discuss the initiative that would result in an action plan. I reasoned that I had received feedback throughout the workshop in other reflections to justify this adaptation.

Remembering the initiative: How do we surf the wave building organizational responsiveness and adaptability in volatility? Some people needed to tie things together mentally by going back to the initiative. They talked about what

surfing the wave looked like and what caused procedural violations. An administrator commented on examining why they do the things they do and keeping options open for alternatives that might be more viable. An owner spoke of the need to identify a coordination mechanism so that it would not fall on one person's shoulders.

As the group discussed the scope of the action plan and who should be responsible, I redirected the flow of conversation to the importance of having people who actually do the work to be involved in shaping next steps throughout the implementation plan. This would give the planning group a reality-check for feasibility and would serve to keep their finger on the pulse of what is happening in the organization at the ground level. I recommended having diversity on the implementation committee for the initiative to be sustainable. This prompted one participant to mention the World Class Committee, which is an elected body with representatives from each function and level within the organization as a potential group to lead the initiative. An owner asked, "It would be counterproductive to make this only Human Resources job. Can the World Class Committee take this initiative on?" An administrator said, "We have the procedures, let's use them. We have the committee, let's use them". All the members of the World Class Committee were participating in the study workshops, so this appeared to be a viable solution. The group collectively decided on the following action plan in Figure 7.

ACTION PLAN:

The World Class Committee will coordinate the launch of an organization-wide initiative focusing on procedures as the catalyst to improving all organizational functions to build adaptive capacity and Surf the Wave.

This initiative will include:

- Raising people's awareness of *why* following the procedures are critical to build commitment and ownership.
- Starting small, perhaps by selecting one of the most problematic procedures and prototyping it from start to finish, and creating a process that can be used with subsequent procedures.

Then you will need to determine *who* will do *what* and *when* to ensure that this is communicated throughout the organization. This will be your working plan and you can set an initial goal for the next World Class Committee meeting next month and then re-assess considering what you learned. A key question to consider is, "*How do we build commitment to this so people feel compelled to manage themselves?*"

Figure 7. Action Plan

As noon approached I made some concluding remarks, "Today we were introduced to the study and some of your organization's challenges and opportunities. You learned about each other's deeper sense of purpose for the work you do together. You decided upon a change initiative. You identified some things to stop doing. You generated some fabulous ideas, sorted them out and chose a few to implement. You made a plan for the next three months that will likely change as you step into action. You have been super productive today and all before noon." The session ended in a large group circle where people were invited to express a brief description of their impression about their time together. This is what was shared.

- Progress
- Discovery
- Don't Do
- Pride Teamwork
- We are all in this Together

- Depth
- Consistency Fun
- Surf the Wave
- Friendship
- Impressive
- Useful

The workshop concluded and we gathered for lunch together outside. Participants walked away from this workshop with actionable things to do that they committed to initiated by the World Class Committee, which meets once a month. They understood that the implementation phase was now in motion. Actual implementation of the action plan is step eight in the problem-solving structure. They also understood that at the next workshop, they would be invited to report on the implementation and the workshop activities would be adapted to their information and what they have learned which is step nine, evaluating outcomes and the process.

Workshop Two

Workshop Two took place three months after the first. Communication between the HR Manager and myself occurred intermittently through email as the World Class Committee worked to integrate the action plan. Two weeks prior to the second workshop, the HR Manager and I talked on the phone and discussed challenges and developed the agenda together.

Table 10

Workshop Two Agenda

WORKSHOP #2 AGENDA					
Saturday, July 16 th , 2016					
8:00 am-12:00 Noon					
8:00-8:30	I.	Welcome by HR Manager [5 minutes]			
	II.	Welcome & Overview of Workshop #1 by facilitator [10 minutes]			
8:30-9:15	III.	Learning from Others: Sharing Challenges, Successes & Innovations			
		During Implementation (STEP 9) Shift & Share [45 minutes]			
9:15-9:30	IV.	Reflection & Meaning Making: What? So What? Now What? Redefine			
		Problem (STEP 1) [15 minutes]			
9:30-10:15	V.	Remembering Human Dynamics: Generative Relationships STAR [30]			
		minutes]			
10:15-10:25	VI.	Break			
10:25-11:00	VII.	Generating Ideas & Developing Action Plans – Operations & Human			
		Dynamics (STEPS 4, 5, & 6): 1-4-All [35 minutes]			
11:00-11:15	VIII.	Group Presentation of Action Plans (STEP 7) [15 minutes]			
11:15-11:40	IX.	Reflecting and Discussing Your Group Processes Wise Crowds [25			
		minutes]			
11:40-12:00	X.	Acting as Consultants to Principle Investigator: Wise Crowds [20			
		minutes]			

Workshop Two began welcoming everyone and reminding returning participants and introducing new attendees to the basics of the research project and a brief overview of the first workshop. There was sufficient time to answer questions, pose questions and receive feedback on the research design. The first activity was reflection upon the implementation phase of their work over the last three months; merging step nine of the problem solving structure with the reflection and dialogue phases of cooperative inquiry.

Activity and Its Purpose: Learning from Each Other: Sharing Challenges, Successes and Innovations during Implementation

Each workshop progressed through iterative cycles of action and reflection while moving through the problem-solving process. The actions taken and the experiences informed participants' understandings of the challenges they face. The fourth tenet of social constructionism holds that as we engage in issues we care about through action we

gain real experience to reflect upon more meaningfully with others (Barrett, 2015). These collective conversations deepen understanding of the problems and the potential solutions naturally evolve to reflect these new insights. The sharing of participant successes and set-backs can help to cultivate a culture of reflection and learning and mutual support. Lipmanowicz and McCandless' principle of 'learning by failing forward' is put into practice by debriefing every step and making it safe to speak up about not just successes, but failures too (2013). The liberating structure I chose for this activity was *Shift & Share*. Four members participated in sharing information from their part of the organization; two from administrative and two from production. It was structured this way to give voice to people from parts of the organization that are heard from the least.

Shift & Share is designed to eliminate large-group presentations and replace them with several small groups spread around the room at stations (Lipmanowicz and McCandless, 2013). The presenter shares their concise story with a small group of people who then have time to ask questions. This liberating structure is particularly effective at spurring conversation with people who are reluctant to speak up in large groups. Shift & Share is conducive to richer conversations as formal one-to-all structures are eliminated and an environment of all-to-all learning is encouraged. This activity also builds trust and a community of practice as people share their often hidden or overlooked contributions (Lipmanowicz and McCandless, 2013) as formal hierarchies are removed from this activity.

The narrators positioned themselves at their stations on a chair and shared for five minutes with a small group, the essence of their successes, challenges and innovations they felt would be of value to others. The listeners then had three minutes to ask

questions to the narrator. Four different stations went through this process simultaneously. When I rang the ting-sha bells after eight minutes, the groups stood up and moved to the next station while the narrator stayed at their station waiting for the next group. We went through this process four times so every participant heard every presenter.

How the five micro-structural elements were arranged:

- 1. Structuring invitation. "Here is how this works. Your narrator will share their challenges, successes and innovations related to the Surfing the Wave initiative since the first workshop. They will have five minutes to share highlights with you. Then you will have three minutes for questions to the narrator. You'll want to keep talking but I will ring the bells so you can quickly move to the next station and we'll do it again. You will repeat this process 3 more times until you've heard everyone. I'll join a group so I can learn too".
- 2. *How space is arranged and materials needed.* A large space was need for four stations set up far enough from each other to minimize distractions from one another. Four to five chairs were place in half-circles facing the presenter at each station.
- 3. *How participation is distributed.* Four members; two from administration and two from production shared their stories of their work while the rest of the members had an equal opportunity to listen and ask questions.
- 4. *How groups are configured.* Presenters were set up their individual stations. The rest of the participants divided into four groups by counting off from one to four

- and going to the appropriate station. The groups stayed together as they rotated through the four stations.
- 5. **Sequence of steps and time allocation.** I described the process how each small group would move clockwise from station to station to hear a story and then have time to ask questions [five minutes].

The small groups traveled to four different stations where narrators told their stories four times [eight minutes per station]. The small groups move to the next station [one minute per move]. This process was repeated until all the groups visited each station.

Activity and Its Purpose: Reflection and Meaning Making

After listening to what happened since the first workshop, people had a better idea of the successes and challenges they each face and a bigger picture of the organization. Using *What? So What? Now What?* (described in workshop one), participants were invited to reflect alone and with each other on three questions. This is a micro-cycle of the action-reflection-dialogue cycle that includes collective meaning-making in light of what they learned from each other. Having people from four different functions within the organization (outside of leadership) present to others is not routine and allowed new types of conversations to occur. The two-fold purpose of this activity was 1) to disseminate information from all parts of the organization to all other parts and increase the shared understanding of the current reality and 2) to generate opportunities for personal interaction to strengthen human connections and trust by structuring an activity where it is easy to engage and difficult to be passive.

The questions asked in three rounds were:

- What? "As our views are expanded by learning from others in the organization, what are you noticing that interests you?"
- So What? "Why do you think this needs attention? In other words, why is this important?"
- Now What? "What do you want to keep in mind as we move forward in discovery today?"

Several themes emerged from the conversation.

Need to understand each other and how work is interconnected. The first was the need to get together and understand each other and how their work is inter-connected. A production worker made the following comment:

Production Worker. "When we went around to the different groups it seemed like we didn't even work at the same company. Everybody had their own perception of what the company was and what their job was. Production worker's name makes it sound like we are a lathe company. Production worker's name makes it sound like we are a shipping and receiving company and logistics. Somehow we need to get that bonded together. How his job is connected to Administrator's job and how it's connected to Production worker's job and how it's all related. We all seem to have this tunnel vision of our own specific area of the company".

Improve quality of communication. The second theme was to improve the quality of communication with each other, specifically the ability to be open, honest and candid with each other in constructive ways, especially with 'undiscussable' issues. Two participants had the following exchange:

Administrator. "Yeah, you just want that feedback and I want to be in the other person's shoes. Because if I'm not then the things that don't work out, weigh more on me, but if I understand what was going on I can be more understanding and helpful. I think what is also extremely important is that we allow each and every single person and group to be honest.

Production worker. "I was going to say that. It sounds like we are getting further sitting here talking and getting to know each other like a teambuilding effort".

Personal responsibility for job. The third theme was taking charge or ownership of your jobs – owning it and doing the little things within your power to improve outcomes. A *production worker* made the following observation,

Production worker. "I observed people taking charge of their jobs. Production worker's name is shipping. Take charge of shipping. Don't ask people what you need to do your job. Tell them. Same way with the lathe. Don't ask people what you need to do your job. Tell them. One of the things I noticed is happening and Administrator brought it up, is production worker. He is taking over tooling. He goes to Administrator and says here is what we need. He's taking charge of that job. He isn't asking, he's telling. I think we need those two things. Everybody needs to get together and figure out how your job relates to the others and figure out that we are one company and not four, and in your particular job, take charge of it. Tell don't ask".

Giving space and time to address the human dynamics in the organization, with particular emphasis on the psychological safety of participants, gives people the opportunity to explore and openly talk about very real factors that influence people's work which normally do not get 'air-time' in a formal space and, consequently, go

underground in the form of gossip, a significant source of organizational conflict (Cloke, 2002). Two main factors impact the psychological safety of a group: "equality of distribution in conversational turn-taking" and "social sensitivity" (Duhigg, 2016). The next activity reveals how individual participants see and experience relationships and work in the organization.

Activity and Its Purpose: Generative Relationships STAR: Remembering Human Dynamics

As leaders work to create conditions where relationships are strengthened, it is important to have discussions about those relationships with diagnostic tools to help identify areas that could be strengthened. Generative Relationships STAR is the liberating structure chosen to accomplish this purpose. Generative Relationships STAR helps people see how they work together and highlights what is working and what needs attention relative to four distinct group attributes. Together, people determine what could make their relationships more generative (Lipmanowicz and McCandless, 2016). The STAR compass tool is used as a benchmark to assist groups track progress on the essential human dynamics at play in the organization. Wheatley argued that relationships are key to forming structures that work (2006) emphasizing the human dynamics of organizational life a critical area of focus. As people see a visual of their individual assessment of the organization alongside the assessment of others, this activity assists people in seeing patterns of interaction that help people step away from blaming individuals and moving towards a systemic point of view (Lipmanowicz and McCandless, 2016). I transitioned to this activity.

"We have reflected on what is currently going on in different parts of the organization related to the change initiative of surfing the wave. Hold that in your minds while we add another important dimension of information about your working group ... namely, human dynamics. How well you work together is crucial to achieving any goal or making progress. Lots of times, it's just seen as too time-consuming considering a demanding workload to pay attention to the human aspect of work. This next activity is designed for you to better understand how you are working together and diagnose current relationship patterns. This will inform the action plans to be developed. The activity is called *Generative Relationships STAR*. When you hear the word 'generative', what comes to mind? [people offer ideas]. Bountiful, flowering, bearing, abundant, fruitful, plenteous, productive, creative. So, keep these ideas in mind as you think about your relationships with each other. Please get into four new groups of five people and form a circle with your chairs. Choose those whom you work with the least or have not yet interacted with today".

How the five micro-structural elements were arranged:

- 1. Structuring invitation. "I invite you to assess this organization as it operates outside of these workshops, so think about this in terms of your daily work and assess the organization on each of these four attributes:
 - **S** Separateness: The amount of diversity in perspective, expertise, and background among group members. How diverse are we as a group? Do we draw out our diverse perspectives among members?

T – Tuning: The level of listening deeply, reflecting, and making sense of challenges together. How well are we in tune with one another? How well do we listen? How often do we talk?

A – Action: The number of opportunities to act on ideas or innovate with group members

How much do we act together?

R – Reason to work together: The benefits that are gained from working together. How important is it that we work together? How clear is our purpose? "On your individual STAR compass sheet, you will draw a dot somewhere along the line that you think accurately depicts where your organization is".

- 2. *How space is arranged and materials needed.* Tables are nice to have but not necessary to complete this activity. People used their notebooks to plot their dots on their individual sheets. Pens were provided for everyone.
 - A STAR compass graphic sheet is required for each person and a larger STAR compass on a flip-chart page for the entire group.
- 3. *How participation is distributed*. Each person worked on their STAR compass sheet individually, then shared their results within their group. Every person had an equal chance to contribute.
- 4. *How groups are configured.* People worked on individual assessments first, then in their small groups and finally at the whole group level.
- 5. **Sequence of steps and time allocation.** Participants were given five minutes to read the descriptions and plot their dots on each of the four dimensions of relationships. They then shared their responses with their small group and each

took one minute to do this. They were instructed to look for consensus and differences (five minutes). The small groups then discussed any patterns they were noticing and how it impacted their functioning as an organization (five minutes). Finally, a representative from each group placed their group's assessment on the large STAR compass flipchart on the wall with a brief explanation of each (10 minutes).

The group generated this chart of the collective assessment in Figure 8 displayed on the next page in its entirety.

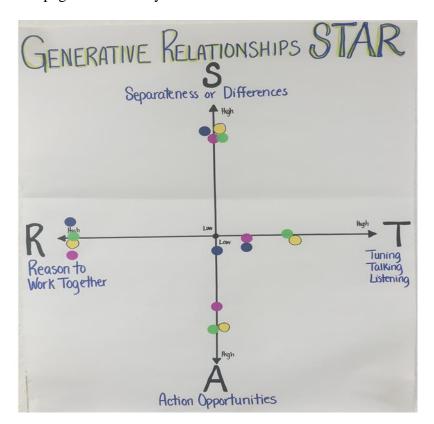


Figure 8 Generative Relationships STAR Flip Chart Image

We debriefed this activity with the following invitation, "What is anyone noticing as you look at the chart? There is high consensus in some places and there are differences in others".

It was interesting to hear the conversation evolve as ten different people participated in this meaning-making discussion.

Owner #1. "The biggest thing for me that I see is the action and it's the most worrisome. If you talk to admin, I think that admin would say that it's extremely high. On the admin side of things we are developing processes, we are fixing things, there is plenty of opportunity to take action. When you get to the people on the floor making chips, I feel like they are feeling like, we are going too fast, I've got all kinds of ideas, but I don't get the opportunity to put them in action. That's my biggest worry that we have got to figure out. The tuning, the talking, I think we all have to agree that's the low one. It's always going to be low. I don't think we can change that one. But our action and opportunities, we have the opportunities to fix it".

Owner #2. "Can I disagree with that? This meeting, for me, is the complete proven evidence that we can. Because we are in a crazy phase and we managed to all be here, so it's possible, we just forced it and you just show up. I do think it's possible".

Production worker. "I think when you force it, schedule reflection, you create the opportunity for action".

Administrator. "I know for me, the mere fact that we are talking about human beings – that for me is the key part. If you don't focus on that and get to the human emotion, then the likelihood that the action will always fall short, is very high. Because the question for anyone is then, what is the motivation for me? But if they feel good in tuning, then you will have everything else high".

Several more people contributed to the conversation and then we moved to break.

The summary of this exercise is stated below:

Exercise summary:

Reason to work together and separateness. The participants all agreed they are a highly diverse organization who have very strong reasons to work together. Each person relies on and needs the unique talents as well as the cooperation and contribution of others in order to do their job well.

Action opportunities. There were differences in perspectives on the other two dimension of action opportunities and tuning. Two groups rated action opportunities as moderately high within the organization, one rated it medium – not high not low, while the last group rated action opportunities as low.

Tuning. The relationship dimension that stood out with the most differences and was rated low by two groups and medium by the other two groups was tuning; the level of listening deeply, reflecting and making meaning of challenges together. Participants agreed in general that this dimension could be improved.

The insights gleaned from this activity acted to inform the action plans developed after the break. **Break** [15 minutes]

Activity and Its Purpose: Generating Ideas and Developing Action Plans:

Operations and Human Dynamics

This activity was scheduled for approximately 30 minutes which is a very short amount of time for the work they were asked to accomplish. They were instructed to develop an action plan for either operations or human dynamics including idea generation, evaluation and selection of best ideas, steps four, five and six of the problem-solving structure. When they had agreed upon what they wanted to work on, they were asked to answer all the questions displayed on the flipchart completing the action plan

(step seven) and to choose someone to present it to the whole group. This activity was the most loosely structured of the day by design. This activity was intentionally sort of messy so that they could practice self-organization and working under time pressure to produce something they were willing to put into practice. Making the case for complex responsive systems, Stacey argued that "left to self-organize in what looks like a mess with no apparent order, agents interacting as a system can produce, not anarchy, but creative new outcomes that none of them ever dreamed of ... The price is an inability to know the final destination or to be in control of the journey" (1996, p. 13). This activity also aimed to create conditions that would amplify freedom and responsibility of each participant, one of Lipmanowicz and McCandless' leadership principles (2013).

Participants were instructed to move to either of the two signs in the room titled OPERATIONS and HUMAN DYNAMICS. People self-selected and the groups were evenly distributed by number. I introduced the next activity which used a modified *1-2-4-All* in which each member silently reflected for about two minutes, before sharing their ideas with their group to be listed on the flipchart.

How the five micro-structural elements were arranged:

1. Structuring invitation. "Now you are going to develop an action plan from start to finish for your work group in the next 20 minutes. Think about the change initiative of surfing the wave in this area and what you can do to build adaptive capacity. Do some silent brainstorming on your notepads and generate a bullet-point list of your ideas you would like to see implemented. We have heard a lot of information and some great ideas so right now, jot a list of interesting ideas down on your notepads what you would like to see put into place in some form or

fashion. Just make it simple. I'd like to see this or try this. This is silent alonework. Take one-to-two minutes to do this. When your lists are made, you will merge your ideas onto a flip chart page in the form of a vertical list so you can vote with dots next to the items you like. So go around and share and try and keep it as succinct as possible. I'm looking for fewness of words".

- 2. How space is arranged and materials needed. The two groups were positioned in opposite ends of the room. People used their notebooks to jot down their ideas.
 Pens were provided for everyone. Each group had a flipchart and markers to record their ideas and their final action plan.
- 3. *How participation is distributed.* Each person reflected individually and then shared their results within their group. Every person had an equal chance to contribute.
- 4. *How groups are configured.* People self-selected into two groups, either operations or human dynamics. They worked individually, then in their small groups and finally at the whole group level.
- 5. Sequence of steps and time allocation. Participants were given one minute to generate possible ideas on their notepads. They then shared their responses briefly within their small groups using fewness of words, one at a time, as a recorder captured their ideas on a flipchart [five minutes]. They were instructed to look for similarities and group together if possible. Everyone was given two dots to vote [two minutes] on what they would like to put into action. After identifying an action, they collaborated to answer the questions that finalized the action plan [15]

minutes]. Finally, a representative from each group presented their plan to the entire group [five minutes].

After I stated the invitation to silently brainstorm and then list the ideas on a flipchart, I mentioned they had 20 minutes to complete this activity saying, "This is your challenge. You get to self-organize. You can structure your conversations any way you'd like. Just be sure everyone is included. You get to ensure everyone has a voice that is heard. And you get to make decisions about what you are willing to do moving forward. Everyone on your team needs to commit to what you develop. There is no passing it off to someone else so you need to develop ways that you will be a part of the solution. These action plans must involve everyone here. As you develop your action plans, there are criteria they must meet, so please keep them in mind as you work together. You have 20 minutes to develop an action plan and then you will have a representative present your plan to the group in about two minutes. The action plan essential qualities were displayed on a flipchart.

- **Attractive/Compelling** What draws others to it to be engaged?
- **Doable/Manageable/Realistic** What makes an action plan manageable?
- **Sustainable** What does an action plan have that keeps it ongoing?

It must also explicitly answer the following questions:

- What actions or change will occur?
- When will it happen?
- **Who** will be involved?
- What resources are needed (i.e., money, staff) to carry out these changes?
- **How** this will be communicated throughout the organization?

 How often are you going to check in with each other to re-visit and tweak as needed?

During the generation of list-building, each group started debating the merits of the ideas and were reminded that this was idea generation and we were not evaluating ideas yet. They corrected their processes. Each group chose the top-ranked issue for their action plan. The operations group had a clear majority issue while the human dynamics group needed to have conversations to merge some of their items into broader categories. Below is a replication of the action plans each group developed:

HUMAN DYNAMICS ACTION PLAN: QUARTERLY COMPANY EVENTS Including Teambuilding and Developing Communication Skills Activities

WHAT ACTIONS?:

We will hold Quarterly Company Events to strengthen relationships through teambuilding and communication activities (plus a winter holiday event).

WHAT CHANGES?: The idea behind this action plan is that as people interact in activity, we get to know each other better. Implementing this structures opportunities for more interaction for people, especially those who do not work together on a daily basis.

WHO?: All employees who choose to participate; no mandatory attendance

WHEN?: Quarterly RESOURCES:

- An organizer core group to plan and coordinate the events.
- Budget core group
- Participants

HOW TO COMMUNICATE: (Owner Name)

- Post Announcements on Board
- Email Announcements
- Text Reminders

HOW OFTEN WILL WE CHECK IN WITH EACH OTHER ON THIS?

• Core group will coordinate – Times TBD. We would like for people who are not in this meeting to be a part of.

WHO WILL LEAD COORDINATION? *Production worker name* will take the lead and coordinate the initial meeting of volunteers where a specific activity, date, and budget will be decided upon. At this meeting people will volunteer to be responsible for various aspects of making this project a success. This is NOT Jennifer's job, but is the entire group's responsibility. Invite and include as many people as needed to help carry out this activity.

Figure 9. Workshop Two Human Dynamics Action Plan

OPERATIONS ACTION PLAN: TOOLS ORGANIZATION PLAN (Cutting Tools)

WHO?: Building 5; All CNC Operators. Lead: Jeff will drive the initiative

WHEN?: Monday, July 18th and ongoing

WHAT ACTIONS or CHANGE?:

- Organize when idle, especially when the machines are running. Use that time to clean up and organize.
- Address non-compliant performance directly with people (who will do this? when?)
- Take final 5-10 minutes of a shift to communicate and debrief with oncoming shift. Also making sure you are organized and getting out of your work area clean.
- Update Labels that are outdated or not labeled at all.
- Steak Lunch for 6 CNC operators implementing this change when it's all organized. (*courtesy of owner name*)

HOW TO COMMUNICATE:

- Labels and communicating on the floor relevant changes.
- Talk! 6 CNC operators communicate and coordinate with each other.
- Memo/notice from leadership that formalizes this.

HOW OFTEN WILL WE CHECK IN WITH EACH OTHER ON THIS?

• Every day. This is the new normal. (Who's going to make sure this happens?)

Figure 10. Workshop Two Operations Action Plan

This activity was designed to allow participants to choose which area they would like to work on and then to design the project they would most like to implement. This activity was time-pressured to force participants to literally get something on paper. It was mentioned to the group that the plan doesn't have to be perfect, it just has to be launched and then re-visited often to adapt to changing circumstances. This is how the organization can build adaptive capacity.

As the action plans were completed, it was appropriate to move into a conversation that reflected on their group processes and how they could develop helping relationships moving forward to ensure implementation of their action plans.

Activity and Its Purpose: Reflection and Dialogue on Group Processes and Developing Helping Relationships

This first part of this activity was designed to gather insights from everyone on how they were working together. A pioneer in applying complexity theory to

organizations, Harrison Owen described the importance of experiencing first and thinking later stating, "... nothing compares with the experience. Words that come afterwards as a reflection and deepening of the experience really seem to work" (1998). Holman described reflecting together to find meaning and coherence essential aspects that reinforce learning (2015). Making space to stand apart from the normal routines gives people the opportunity to look at what is happening from a new perspective allowing them to identify new patterns and make adjustments.

The second part of this activity was designed to give critical and constructive feedback to me about my own processes and the workshop design. This activity provided an example of how to give and receive critical and constructive feedback in a safe way. As the designer of the workshops, it was necessary to learn what was working and what was not for the research, but the intent was also to provide a learning experience for participants. Bushe and Marshak describe as one of their five essential event design elements as assisting the sponsors (usually formal organization leaders) in learning how to nurture emergent change by expressing the intent to unleash and encourage diverse ideas for the transformation of the group (2015). In this case, this design element focused on the workshop design and me as a facilitator.

The liberating structure I chose for this activity was an adaptation of *Wise Crowds* blended with *1-4-All* to tap into the wisdom of the whole group in quick cycles. *Wise Crowds* is designed as a consultation to engage people in helping each other with challenges. In this case, I was the "client" who asked the group for help and received feedback from three small groups. In the client role, I could practice listening without defending. *Wise Crowds* taps into the individual expertise and ingenuity of everyone.

Asking for and giving help are skills that are developed through this activity while at the same time building capacity for self-awareness and self-correction. All participants learn from everyone's experience and wisdom while supportive relationships are nurtured.

How the five micro-structural elements were arranged:

- 1. Structuring invitation. "After a workshop I always have personal reflection time where I scrutinize what I did or didn't do that either helped or hindered the group. But it's important for me personally and as a fundamental piece of this research that I learn from all of you three things. So this next activity is structured for reflection and dialogue focusing on three things. You will break up into three different groups who will act as my consultants. I will give you time to address each question and then you will give me feedback. The questions are:
 - What worked today? What was helpful?
 - What didn't work? What was awkward or hindered communication?
 - How can I be more effective as a facilitator? What would you like to see changed for the next workshop?"
- 2. *How space is arranged and materials needed.* Participants counted off by three and pulled their chairs into three different groups. They had their notepads and pens for taking notes.
- 3. *How participation is distributed.* Each person had an equal chance to contribute with the *1-4-All* structure.
- 4. *How groups are configured.* There were three groups of six-to-seven people varying by level and function.

5. Sequence of steps and time allocation. The client presented the challenge and requested help [two minutes]. The consultants worked individually on each question [two minutes]. They shared their responses with their group [five minutes]. The group consolidated ideas and a spokesperson shared the group's suggestions with the client [15 minutes]. The client offered feedback to the consultants summarizing what was heard and stating take-aways [three minutes].

The results of the activity follow.

Activity Results

What worked. Participants identified several aspects that worked well.

- *Inclusion of diverse groups and personal interaction*. The different groups were beneficial. People enjoyed going to diverse groups, interacting with different people and getting to know each other better. Each group expressed an appreciation for the diversity and the fact that the company allowed people from all parts of the organization to be there and participate.
- More structured activities with explicit directions and tight time limits. Some thought the activities that were less structured were more challenging in a group and others liked the self-organization aspects to those activities.

Production worker. "We enjoyed the more structured activities as opposed to being left to your own interpretation of what the question is. I found it easier just to answer your question or your activity when they were more structured like operations or human dynamics. If it's too open we will just waste too much time".

Owner. "The constraint that you put on us to build a plan was good. You would think counter-intuitively that people wouldn't like it but they liked it. They enjoyed being forced to get the plan done within a few minutes".

Participants identified several activities as particularly beneficial

• Activities. Several participants mentioned the Generative Relationships STAR activity as insightful and beneficial.

Production worker. "The STAR activity where it was mapped out on a piece of paper exactly what it is that we were doing. Specific to that activity, keeping it to where you answer on your own first and then come together where people were honest and open was good. The STAR chart was really good because it was a real eye-opener on how the different thought patterns are. Especially the action and the tuning, the point spread on those two made you really think, so that was a good activity".

Pre-defined action plan topics. Participants also liked how the two aspects of the
organization to work on, operations and human dynamics were pre-determined
which made the processes more efficient.

What didn't work. Participants identified some aspects that were problematic.

- Room acoustics. There were too many voices talking at once in a room that echoed. Some people had a hard time hearing everything.
- Arrangement of people. Some groups were too close to each other to hear what was going on in their own group because they weren't spread out enough.
- Unclear directions. At times, participants were uncertain about the exact steps
 they were supposed to be addressing.

Administrator. "We didn't start our groups with a clear understanding of the specific questions that we needed to answer, but we felt like we were under the gun to get going, so we couldn't stop to ask questions. We wanted time to get clarification on what your intent was. By the time we got to the second part of Action Planning, we were like, what were the questions again?"

Recommendations To Do Differently

Participants identified ways to improve their experience.

Recommendations:

- Survey physical space and organize accordingly. It was suggested I survey the environment I am working in prior to coming in and identify where the groups will be situated within the space ahead of time, then communicate it to them clearly: group one goes here, group two goes here, etc.
- *Pre-arrange working groups for more diversity*. It was mentioned that letting people choose to go to either operations or human dynamics filtered out some diversity. The operations group could have used a little more diversity that may have impacted what they chose to work on.

Administrator. "I'd just like to point out that there was widespread agreement to focus on the CNC shop and that what we do here, we would like to transfer the learning to other parts of the organization".

• More involvement from others collaborating prior to next workshop. There was an expressed desire for more involvement from other people within the organization in designing the workshops.

Owner. "After the last workshop, only owner's name had communication with you (facilitator) and the result was that the responsibility fell only on her, so she would like others to be involved. Also, being able to get together as a group after this and somehow communicate together to get back to you as opposed to it falling on one person, would be good".

• Allow time for participants to ask questions. It was mentioned that I could have asked before each activity if anyone had any questions.

As the time to close workshop two approached, we formed a large circle and I made some summary comments on their progress and they summarized their experience in one word.

Closing Circle

In wrapping up the activity, I summarized what they had accomplished and the feedback they gave me from the reflective consultation. I committed to making this my own action plan for the next workshop and all my future work. I thanked them for helping this research project and for helping me become better at this work. The session ended in a large group circle where people were invited to express a brief description of their impression about their time together. "We will conclude by going around the circle so each person can state one word that kind of sums up the day or just a few brief words of an insight that impacted you today that you would like to share". The comments follow:

- Momentum
- Proud
- Teamwork

- Realization
- Very hopeful
- Communication
- Progress
- Goal
- Didn't suck
- Collaboration
- Action
- Learning
- Connections
- Perseverance
- I like the way we are all willing to work together to get to the end

Workshop Three

Table 11

Workshop Three Agenda

Workshop #3 Agenda					
October 1 st , 2016					
8:00 am – 12:00 Noon					
8:00-8:10	I.	Owner Introductory Comments			
8:10-8:30	II.	II. Facilitator Welcome, Purpose of Today's Workshop and Overview of			
		Workshops 1 & 2			
8:30-9:00	III.	Remembering Personal Purpose (Appreciative Interviews/9 Why's)			
9:00-9:45	IV.	Reflection on Action Since Last Workshop [STEP 9] (Celebrity			
		Interview/Fish Bowl)			
9:45-9:55	V.	Break			
10:00-11:00	VI.	Debrief (What?, So What?, Now What?/Conversation Cafe)			
11:00-11:30	VII.	Make Adaptations to Action Plans			
11:30-12:00	VIII.	Reflection on Group Processes (What? So What? Now What?)			
12:00-12:30	IX.	Lunch & Concluding Remarks (Positive Gossip)			

Activity and Its Purpose: Welcome, Purpose of Today's Workshop & Overview of Workshops One and Two

Workshop Three got started about 15 minutes late, and I had fortunately built about 10-15 minutes of extra time into the first half-hour of the workshop. I welcomed participants and thanked them for showing up on a Saturday morning, then moved right into the overview of the last two workshops to remind people of what we were doing. We then moved into the next activity.

Activity and Its Purpose: Remembering Personal Purpose

This activity was positioned at the beginning of the workshop to get participants immediately into personally meaningful conversations from an appreciative perspective. While purpose was addressed in the first workshop, it needs to be an ongoing conversation that keeps ideas alive and relevant in an ever-changing landscape.

Lipmanowicz and McCandless emphasize the essential nature of being clear on purpose (2013) which has the potential to deeply engage people as they can connect their personal purpose with the larger societal need for their work. Wheatley stated the need for autonomy and a strong sense of self-reference to generate continuity and coherence (2006). She argued that the world is naturally orderly and every individual is both unique and connected within a larger system. Structuring time to have a continued dialogue keeps purpose, vision and values alive as individuals better understand their own essential and unique contribution to the whole.

I chose to blend *Appreciative Interviews* with *Nine Whys* to design an experience that generated deeper interpersonal connections where people shared success or achievement stories with each other to acknowledge and surface a strong sense of self-

reference. I combined this with *Nine Whys* to expand the conversation to a larger purpose. *Appreciative Interviews* can reveal hidden success stories. Sharing achievements or stories of surmounting enormous difficulties offers a fresh approach to the usual deflating talk about problems (Lipmanowicz and McCandless, 2016).

Appreciative Interviews: Building Upon Successes

How the five micro-structural elements were arranged:

1. Structuring invitation. "I promised you in the first workshop that we would talk about purpose again. Here's why I think this activity is essential. It is so easy, especially when you are experiencing high growth and just hanging on the edge of chaos, to lose sight of your personal purpose. But if you can remember that and talk about it and bring it to life and even connect it to your larger work in this organization, it is much more potent in motivating you than policies, rules and procedures can. That's why we're doing this. To tap into the heart of this organization.

Think of a personal accomplishment or success story. Personal or Professional. It may be how you overcame a huge difficulty or it may be some form of self-mastery; something you are willing to share with others. You will be sharing your story for about two minutes or less. Then your partner will ask, "why is that important to you?" Just have a natural easy conversation, but the listener, at the right moments, needs to ask again "why is that important to you?" Just like the first workshop when we did this, we are trying to get at our deepest meanings for what makes life worth living for us. What gives your life purpose? So this first round of the conversation will go about five minutes total. Then you'll switch

roles and the listener will be the storyteller while the other listens. The listener will ask "why is that important to you?" at appropriate moments in the conversation and you should be getting at a personal reason; a purpose for why you do what you do.

Go deep with compassion and the intent to understand the other more deeply. Be curious and open-minded. We all have different motivations".

When both people had shared I asked them to find another pair and to each take one minute to share their answer to this question: "Why is your purpose important to this organization? Make sure everyone has time to speak. You have four minutes. Your group will select a representative to share your insights with the larger group. Any questions?"

- 2. *How space is arranged and materials needed.* Each person was asked to pair up with a person whom they knew or interacted with the least. Chairs were needed as participants had face-to-face and knee-to-knee conversations.
- 3. *How participation is distributed.* Each person reflected individually for about a minute and then selected who would share their story first. The pairs then found another pair to share insights. Each person had an equal opportunity to share.
- 4. *How groups are configured.* Individuals reflected silently then shared with each other in pairs. The pairs moved to another pair to form a quad. The quads shared with the entire group the essence of what they gleaned.
- 5. Sequence of steps and time allocation. Participants were given one minute to reflect upon a story they were willing to share. They then shared their stories with their partner [three minutes]. When the person was done sharing the story, the

partner asked "why is that important to you?" and they continued their conversation digging deeper into purpose [five minutes]. They switched roles and repeated the process of sharing and then deepening then exploring purpose more deeply [eight minutes]. The pairs then found another pair and answered "why is my purpose important to this organization?" [five minutes]. Finally, a representative from each group shared an insight from their group [five minutes].

The debrief of this activity was intended to capture insights from the quad discussion that illustrated how each person was important to the organization, however, the first response from an owner highlighted a quote he heard from his partner, a production worker.

Owner. "[Production worker's name] said, 'You're going where I've been', so he's already had the experience of what we are trying to get to".

Another owner spoke up and talked about something really positive his partner said. Although this was not the plan, in the moment, I went with it because it was such a positive spin on how I had originally designed it. Instead of capturing an insight from a group of four, each person shared with the entire group how their partner was important to the organization. They had to listen to their partner to do this well. Several people checked in with their partner to ensure what they said was accurate. It took longer to debrief but the amount of respect and empathy demonstrated was such a positive outcome. This turned into a very nice tuning and talking exercise mentioned in the *Generative Relationships* activity from the second workshop as an area they all agreed they needed to improve.

As we wrapped up this generative conversation on purpose it was time to reflect on the action taken since the last workshop.

Activity and Its Purpose: Reflection on Action Since Workshop Two

It had been almost three months since the group had been together in the second workshop. Making space and time to reflect on the action taken was important to provide a broader understanding from different areas within the organization. As in the first workshop, I again chose to combine *Celebrity Interview* and *User Experience Fishbowl* to start sharing information that helped to reveal realities in different parts of the organization. The group was organized so that a representative from four different departments within the company sat in the center of the circle and had a conversation with each other about the challenges they faced and the successes they experienced throughout implementation of the change initiatives. The outer circle's role was to listen intently and to jot down any questions they had. The inner circle participants had 15 minutes to talk with each other and then another fifteen minutes to take questions from the larger group in clarifying and meaning-making dialogue.

This liberating structure embodied the three activities that create conditions for emergence cited by Holman. The conditions include creating a welcoming container that invites diversity and poses possibility-oriented questions; creating opportunities for individual connection and expression; and reflecting together to find meaning and coherence (2015). Five people were invited to engage in a conversation in the inner circle from human resources, purchasing and inventory control, finance, tooling and fabrication, and engineering. These diverse participants were asked to share something they were most proud of in their part of the organization, identify their biggest challenge and name

something with which they would like help. After each person shared, the inner circle participants asked clarifying questions to each other. It was then opened to questions from the outer circle as people engaged in meaning-making conversations.

How the five micro-structural elements were arranged:

1. *Structuring Invitation*. Representatives from five department including human resources, purchasing and inventory control, finance, tooling and fabrication, and engineering were invited into the center of the circle to join in a "talk show" format conversation. The other group members were invited to listen with curiosity and write down questions for their cohorts.

"Now we are going to do some reflecting on action and what's been going on since the last workshop so we can all have a greater understanding of what's going on in different parts of the organization. In the last workshop, you discovered that your Tuning, Talking & Listening dimension of the Human Dynamics in the organization could be improved. Many of you thought something like a State-of-the-Union event would really help with the tuning, so I thought it would be beneficial for you to get a little more first-hand experience in a Tuning, Talking & Listening activity practiced in unconventional ways".

"We will arrange the chairs in two concentric circles. Representatives from different functional areas of the company will share what's going on in their part of the organization. They will share something they are really proud of and they will tell us their biggest challenge. Then they will say what would be nice to have some help with. Each person will have 3 minutes to share their information, so we will listen to one person and then we will have three minutes for questions from

other members in the inner circle. Then we will go to the next person. When everyone has spoken and answered questions, we will open it up for questions from the outer circle. Remember this is about increasing our understanding of what is going on in different parts of the organization so try not to give advice. This is not problem-solving. This is information-gathering. We will do some collective meaning-making after the break about what we have learned".

- 2. *How space is arranged and materials needed.* Five chairs were placed in a small circle. The remaining participants arranged their chairs in an outer circle and observed the inner circle interactions. Each person was provided with a notepad and pen to make notes.
- 3. *How participation is distributed.* In part one of the interview process, everyone had an equal opportunity to listen to company representatives. In part two, the conversation was enlarged to include the outer circle who contributed questions and comments to what they heard, deepening the collective conversation.
- 4. *How groups are configured.* The whole group was included and had a specific role with the interviews and the follow up Q & A.
- 5. Sequence of steps and time allocation. The questions were introduced by the facilitator and information was provided on how to arrange themselves for the activity [three minutes]. The interviews proceeded and it was opened to the whole group for questions and comments [30 minutes]. The facilitator transitioned the conversation into the next activity [one minute].

Activity Summary

This activity served as a 'state of the union', which some of the participants suggested doing in the second workshop. This was organized with people representing engineering, purchasing, tooling, human resources and finance sitting in the inner circle of a larger circle having a conversation. The outer circle was arranged with everyone else listening to what they had to say about their part of the organization so everyone could gain a greater understanding of the bigger picture of the organization. This activity also helped the group practice talking and listening to each other. Each person reported on something they were really proud of, their biggest challenge, and something with which they would like help. A summary of each representative's comments follows.

Tooling. The CNC operator told the story of his part of the organization since the last workshop. He described his two biggest accomplishments as building teamwork, especially with another co-worker who helped implement the operations action plan and getting the tools organized while cutting down on tooling costs. His biggest challenge was helping people get in the mindset of organization as a part of their daily work. He could use help with communication from leadership on this initiative to support its legitimacy.

Engineering. The engineer representative said, "I am proud of the resiliency of the team and the department and the level of innovation". He noted his biggest challenge was managing the heavy workload with the ever-changing priorities and pressure. Having to run around the shop to find something detracts from other often higher priorities. He would like help with finding a communication solution with the shipping & logistics department.

Human Resources. The HR representative mentioned getting an uninsured employee who slipped through the administrative cracks back on full-coverage insurance. His biggest challenge is figuring out taxes at the end of the year and would like assistance with that challenge.

Purchasing. The purchasing representative cited the biggest achievement as communicating clearly with what other people what they are supposed to be doing. She also mentioned getting prepared for audit and launching the new inventory control system. Her biggest challenge is needing help with managing changing priorities. She would like help prioritizing her workload and also in getting back information needed.

Finance. The finance representative noted the biggest accomplishment was bills being paid on time and establishing a good reputation with suppliers. He also noted the cash flow was managed well allowing the company to pay its bills as they arise. The biggest challenge was getting every invoice entered into the computer system and the finance department needed help from others to get this done properly.

After everyone spoke and answered questions from the inner circle, it was opened to questions from the outer circle. This activity was intended to increase understanding of what is going on in different parts of the organization. This was an information-gathering activity with requests for help to provide possible direction with action plans. It was not a problem-solving activity so participants were asked *not to give advice* during this activity. This activity took about 40 minutes. A summary of the conversation follows.

The outer circle participants had the chance to ask questions and make comments. Discussion touched upon invoicing, communication between departments, the operations action plan implementation, and the heavy workload and constantly changing priorities.

Tool organization cut tooling expenses by more than half. As the discussion unfolded, the CFO (owner from the outer circle) added information to the operations implementation from a financial perspective and reported that tooling expenses in May and June were about \$22,000 per month and in July and August they were \$9,000 each month. It was stated that the vast majority of that savings came from the tool reorganization. The owner continued:

Owner. "My biggest frustration in our company is our buildings are not conducive to having a central tool crib. I tried to work on it and it's one of those cases where top-down doesn't work. Bottom-up does. And that was a success story for me from these whole group meetings that we have been doing with you [at facilitator], that paid for everything. That's huge. Already we've seen at least \$10,000 in tooling savings, not to mention that's going to be ongoing because *production worker name* is there – one of the guys is pushing it along. It's not me, I don't have to come in to push it".

Communication and understanding others' work needs improvement. Another theme that seemed to resonate with participants was the issue of communication between departments. It was asked if the communication from Engineering is perceived as team members giving and receiving feedback or if it is perceived as one wanting to control the other.

Administrator. "I wouldn't say they are really dropping the ball, they are suffering like everyone else in the company that's a quickly growing company where it's just a few people that do all of the work so maybe the answer lies in some simple system like an electronic posting board or something".

Someone else suggested it's a matter of perception and that we should probably ask them how they perceive it. Another person stated the importance of understanding the different job structures that are less conducive to responding to emails because their job is simply not around a computer. Another agreed and stated that a solution was still needed.

This activity included reflection, information sharing, and sense-making. Group conversations tend to meander and feel a little messy in the moment. Wheatley stated that one of the most difficult concepts for groups to grasp is to support the messy ebb and flow of creative endeavor, and to trust that order will appear. She noted, "We have created trouble for ourselves by confusing control with order" (2006). She also advocates organizations be open to more and often ambiguous information from different sources that offer no immediate value. By giving participants a voice that is heard, listening to various interpretations and processing them collectively, information begins to take order and shape (2006). This conversation set the stage for debriefing and further meaning-making which would then flow into revising actions plans moving forward. **Break:** 15 minutes

The first part of the workshop included a summary of what had transpired in Workshops One and Two as a reminder of the group's progress, a conversation on purpose that delved more deeply into why their work is important which spontaneously turned into an appreciative conversation where each remarked on the talents and contributions of others, and finally a reflective conversation in which the various parts of the organization shared with others their successes, challenges and requests for help. These aspects of the workshop served to get people on the same page so to speak as they engaged in dialogue with each other about what was happening in the organization. It

helped humanize experiences and allowed people to see the interconnectedness of their work and the impact they have on each other. It served to deepen meaningful conversations and strengthen interpersonal relationships. These activities set favorable conditions to look forward creatively as we redefined the problem.

Activity and Its Purpose: Debriefing, Meaning Making and Redefining Problem

Conversation Café is a Liberating Structure designed to allow all voices to be heard without being questioned or challenged initially. It creates space for differing perspectives to be heard while others practice deep listening with curiosity and compassion. This activity builds a shared understanding (Lipmanowicz and McCandless, 2016) and helps groups see that multiple realities exist (Bushe and Marshak, 2015). Conversation Café creates a safe container which invites and welcomes a diversity of perspectives from within the system (Holman, 2015) by creating opportunities for individual expression (p. 145) without having to defend ideas initially. In this way, people are liberated to express what they believe needs to be said without dissension or debate. I chose this structure combined with the debriefing liberating structure of *What?* So What? Now What? because the group has consistently communicated throughout these workshops the need for better communication, especially listening more deeply to each other. Conversation Café structures this listening and individual free expression by design.

How the five micro-structural elements were arranged:

1. Structuring invitation. "We just had a conversation where we got updated on different parts of the organization and heard requests for help. We collectively did a little sense-making because there are a lot interconnected activities and

dynamics. Now we'll get into different groups of four. Try and make sure that you are diverse, so look for people who you don't normally work with. I'll pose a question and you will address it in your groups in 3 Rounds. There will be a total of 3 questions. I will ask you a question which you will think about silently for 60 seconds, then you will each share your insight with your group. But there's a catch. This is called a talking stick. The person holding this (shows stick) is the only one who can speak. Everyone else must listen. When they are done speaking, they pass it to the next person to share. This is time to practice some deep listening with each other without commenting on what people share. The listener's job is to accept whatever is offered and think about it".

Round One. Each person has 60 seconds or less to respond to the question. When they are done, they pass the talking stick to the next person who has 60 seconds. Round Two. Open conversation where you offer thoughts and feelings about what you heard, but it's your job to make sure everyone is heard. You'll have 5 minutes for Round Two.

Round Three. Go back to the talking stick. Each person has 60 seconds to offer their takeaways. Select someone to record group takeaways for each question.

I will give you instructions as we go. Are there any questions?

- 2. *How space is arranged and materials needed.* Participants divided into groups of four with chairs clustered around the room far enough away from other groups that there wouldn't be noise interference.
- 3. *How participation is distributed.* Each person spoke for one minute in the first round. Everyone had an equal chance to speak and listen to each other.

- 4. *How groups are configured.* The groups were mixed with diverse participants.
- 5. Sequence of steps and time allocation. There were three questions posed to the groups. For each question, they did three rounds of responses as follows. In round one each person responds individually to the question for 60 seconds while holding the talking stick. No other participant is able to speak. When the person is finished, they pass the talking stick to the next person in the group until everyone has had an opportunity to speak [five minutes]. Round two starts immediately thereafter in a free-flowing conversation where participants respond to what they heard. They were reminded to ensure everyone had a chance to speak [five minutes]. Round three utilizes the talking stick where each person has 60 seconds to offer their take-aways from the exchange [five minutes].

Activity Invitation

A summary of W^3 question is provided using *Conversation Café* to structure the collective inquiry.

- What?. "In light of what you have heard, what new understanding is emerging for you? What is surprising? What should not be ignored?"
- So What?. "Why is this important to pay attention to?"
- Now What?. "Given our growing understanding, when we look at the change initiative, is this an appropriate focus that may need some simple adaptations to move forward or is something more important emerging?"

The activity was carried out and we then moved to debriefing and action planning.

At this point in the workshop, we had one hour left before breaking for lunch and I did

not have time to implement every activity I had planned, so I asked the group for help. "I

am in a little bit of trouble right now. I have planned more activities and there is not enough time to get to all of them. We have to walk out of here with an action plan and we need to have a conversation about your group processes. So, for the next hour you all need to make some decisions about what to do moving forward. We are going to try and find the best way to do that but I need your help. You have some ideas, I'm assuming. I'm going to write down the insights that I hear from you. We are going to do some collective sense-making together and figure out what makes sense moving forward that is going to move some things that were stalled out into the realm of action. And then we have to reflect on our group processes – how you all think you're working together. Let's move through the group takeaways quickly and decide on what makes sense next".

A summary of the collective discussion follows:

Question #1: In light of what we have heard, what new understanding is emerging for you? What is surprising? What did you hear that should not be ignored? Each group expressed the need for some sort of communication strategy. An administrator stated, "Communication is one of the key processes that we are trying to optimize".

Question #2: Why is it important to pay attention to these things that you have identified? The main ideas that emerged were that communication facilitates productivity and builds trust, while "dropping the ball" with communication erodes trust. One owner stated that the core of their work is figuring out how to work together and "communication and teamwork are central to what we do. The tasks will change but we need to be good at collaboration".

Question #3: Given our growing understanding, when we look at the action plans, is this an appropriate focus that may need some simple adaptations to move forward or is something more important emerging? The groups agreed that the focus of the change initiative Surf the Wave was very relevant and an appropriate organizational focus. They suggested that the previous human dynamics action plan from the second workshop was too broad and that they needed to start at a more manageable level initially, expressing hope that it would gain momentum as it was implemented. One group suggested simple logistical fixes to some communication problems between departments. The groups decided to have representatives draw up a quick plan suggested by the first group that merged the logistical adaptations of the others.

An administrator mentioned the importance of inclusion saying that the success of the operations action plan happened because the people who would be needed to implement it were included and involved in shaping the initiative. It was suggested that this result would be unlikely had they not been involved.

Administrator. "We need to create more of this when everybody gets to know the bigger picture of what is it we are trying to do, what is it we are wanting to accomplish. The tooling coordinator understood exactly what needed to be done and she knows where the things are. She knew exactly how to make it work". He went on to say she had the commitment because she was included in these workshops.

With this in mind, a smaller group of volunteers worked together to formulate the following action plan.

Activity and Its Purpose: Make Adaptations to Action Plans

I handed the group a sheet with the structure of an action plan and they worked together to complete it. A representative read the action plan to the group as follows in Figure 51 displayed in its entirety on the following page.

Human Dynamics Action Plan October 1st, 2016

What actions or change will occur?

We will have monthly meetings during the lunch hour. In these meetings we will be talking about: action plans, the strategy to achieve those plans, and the general direction that the company will be taking.

When will it happen? The meeting will be scheduled on the 15th of every month.

Who will be involved? We decided to start smaller initially. The management team that meets every day plus others from each department at the workshop.

What resources are needed? We need the workshop Summary Report supplied by facilitator. We also need everyone's participation and the ideas they bring from their various departments. We also need the meeting space for the gatherings and will use the same room as the workshops.

How will this be communicated? When the team meets, we agree on the plan of activities for the next 30 days. These are the action plans. Every member of this team will then take this back to their various departments and make sure everyone understands the direction we are taking.

How often will we check in with each other? When we come back each month on the 15th, we will start with reflection – looking back at action plan items A, B, & C. How did it go? Did we achieve it or not? If not, how can we approach this differently? We reach agreement and go back to our cohorts and share. This worked great so let's keep it up. These things need work so we made some adaptations so let's try another way. We all know the direction we want to go so we work to find a way to do it.

Who will lead the coordination? Initially, two owners will lead the coordination.

Two logistical suggestions: Get shipping coordinator a Bluetooth. Get logistics coordinator an iPhone with Siri focus.

Figure 11. Workshop Three Action Plan

Up to this point in the final workshop the group had progressed through the problem-solving process through step seven and it was time to reflect on group processes.

Activity and Its Purpose: Reflection on Group Processes

I said to the group, "Well done. You have a plan that also fills the need for a systemic change. This is an ongoing thing that you are formalizing in the structure of the organization. You are building in a mechanism that supports your initiative of Surfing the Wave by better coordinating your communication, which means being more adaptive – you are creating space to pause for that reflection. You're having dialogue about it and then taking adaptive action. This helps your responsiveness in the organization. This is very much in alignment with what you had said you wanted to do at the beginning of this study. Nice work."

Because lunch was scheduled after the workshop, one of the owner's and I decided to combine lunch with reflection time so we invited people to grab some food and assemble back in a large circle where we would have a collective conversation. As the group re-assembled with their food I asked, "If we could, I'm curious if we can just have an open conversation and everyone participate as you reflect on your group processes, how you are working together throughout these workshops. I'd like you to think about what's possible now in the way that we interact together? Is there anything that you can take away that you liked that was useful and bring it forward to your future interactions?"

The first response was from an owner who began describing the importance of better understanding organizational purpose.

Owner. "I think that is why we keep getting the bigger direction question from people because we all want to have the same 'why do we come to work?'. I think that's the main thing that we need to focus on is why do we do what we do? Not why do we do

it for the customer. The customer needs the part. What is our personal why and how does that connect with the company?"

A few more people responded very thoughtfully and another owner chimed in.

Owner. "I just wanted to go back and make sure I understood. Are we supposed to be looking at his question or are we supposed to be looking at how effective these processes are?".

I appreciated the awareness and redirection, however, the conversation about purpose was engaging and I told the group that I have lots of feedback and I will be getting even more in the interviews. I told them it was an important conversation that needed to be ongoing because having clarity about what makes you get up in the morning and how that contributes to society is a powerful motivator. The conversation about purpose continued for about thirty more minutes and an owner stated he would like to know everyone's personal reason for working at the company. I responded, "Honestly what I've found is that if you want to know something, the best thing to do is to ask people directly, instead of trying to assume or think that you might know. What I've found during these workshops, when the space is created for people to have conversations, I think what I heard you guys saying is that there is a lot of open and honest dialogue going on. So, change up the questions and you can probably get the information that you are looking for".

As the conversation about individual and organizational purpose wrapped up, I moved to the final activity of workshop three.

Activity and Its Purpose: Positive Gossip

Nobel Prize winner and early pioneer of complexity science Ilya Prigogine sought to understand how systems create order out of chaos. He found that positive feedback tells a system to do more of the same (Prigogine and Stengers, 1984). Drawing upon this idea I wanted to wrap up the event on a positive note. I chose to adapt the liberating structure *Positive Gossip* to share my appreciation for each person, and to shine a light on the positive qualities in the presence of their peers. We were organized in a large circle and I spoke to each person their positive qualities that stood out to me.

"Our time is drawing to a close now, but I'd like to share some thoughts with each of you. This entire experience has really impacted me as I have come to know and learn from each of you. So, I have a few thoughts ..."

The workshop concluded and we proceeded to schedule the remaining interviews.

Conclusion

This chapter presented the new LSPS model of facilitation merging Lipmanowicz and McCandless' liberating structures (2013) with Dewey's (1971) nine-step problemsolving structure as a dialogic approach to helping diverse groups lead change together. The rationale for the development of this new model was made and the chapter concluded with a working example of the LSPS model in action as implemented in this study. We now turn our focus towards the findings chapter which presents the results of this study.

Chapter 5: Findings

Shared Leadership Works

The objective of this chapter is to present the findings of the study supplemented by quotes from participants to give real voice to their experiences. This study illuminates some foreseeable advantages of a shared leadership approach within this organization and reveals some unexpected benefits. It also unmasks ways in which to improve the participant experience with implications for model refinement. Finally, the findings unveiled some deeper issues, unrelated to the research questions that speak to the importance of inclusion and open dialogue, essential aspects of shared leadership. The discussion begins with a review of the research, its goals and how the study accomplished them; then progresses through the research questions with findings highlighted.

Study Overview

This participatory action research case study sought to address the problem of including and engaging others in a power-with approach while at the same time working within a system structured for exclusion and power-over others. It is this paradox that countless organizations face. The entangled functions between formal hierarchical structures and informal complexly adaptive emergent forces must work together effectively for organizations to function properly (Uhl-Bien & Marion, 2009).

Organizations must learn how to adapt towards a more democratic or shared leadership approach to competently compete in today's global marketplace. The space where hierarchy merges with heterarchy is the forefront of leadership and OD research and where this study is situated. The purpose of this study was to understand how the Liberating Structures Problem Solving model (LSPS) helps participants in a

manufacturing organization as a single case study practice a collaborative dialogic OD approach to change within a hierarchical structure.

Examination of the Research Goals and the Way They Were Met

This research had three primary goals. They were: 1) to help study participants develop a dialogic OD practice by trying new communication and decision-making patterns within the LSPS model; 2) to reduce sources of structural conflict inherent in hierarchy by fostering enabling conditions for the emergence of learning, adaptability and change; and 3) to improve the LSPS model for use in other organizational settings. Each of these goals was achieved to some degree within the scope of this project.

The first goal was to assist participants in this study develop a dialogic OD practice. A dialogic approach to change views change as a continuous and immanently interpretive and discursive process (e.g., Barrett, Thomas & Hocevar, 1995; Heracleous & Marshak, 2004; Marshak & Grant, 2008a). Organizations, from this perspective, are understood to be an "on-going conversation" as opposed to either a machine or a living organism (Broekstra, 1998; Oswick & Marshak, 2012). This understanding implies that to change an organization, the conversations and narratives must be changed (Ford & Ford, 2008; Shaw, 2002). Beginning with Workshop One, activities designed to structure one-on-one, small group and whole group dialogue were initiated. Participants moved from one liberating structure activity to the next as they moved through problem solving steps. A presentation of liberating structures and any form of one-to-all teaching were intentionally omitted from this study by design because they are power-over structures that create conditions conducive to conflict. The participants immediately engaged in a dialogic OD practice using liberating structures throughout the entire study. After many

of the dialogic activities, participants engaged in individual and whole group reflection to further advance their understanding.

Workshop One was perhaps the most awkward in terms of group dialogic process because these group processes were something very different from the normal communication and decision-making patterns within the organization. Participants did not know what to expect and it moved a little more slowly than in subsequent workshops. Workshop Two flowed easily as most participants had already experienced the practice of getting up, moving around, having structured conversations with people they were least familiar with and then reflecting together on what they learned. Through this dialogic practice the participants gained skills in sharing their perspectives, successes and challenges with others, listening to others and asking for help from each other. As the study progressed the participants became more comfortable and more familiar with the processes. While the goal was to assist study participants in practicing new communication and decision-making patterns, the natural extension of this is for participants to use their newly-developed skills to continue a dialogic practice beyond the study.

The second goal of this research was to foster enabling conditions for the emergence of learning, adaptability and change for the participant organization. Holman (2010) identified a pattern for creating conditions for emergence including 1) disrupting the status quo, 2) surfacing differences and innovations among constituent participants, and 3) as those participants interact, allowing coherence to emerge (2015). This study designed these three conditions within each workshop. In this hierarchically structured contract manufacturing organization, communication and decision making normally

occurred with a few people from the top-down. The workshops disrupted this pattern by including people from all parts of the organization to participate in determining what issue to work on and how to implement it. The decision-making process was collective with each person's voice weighted equally. When it was time to make a decision, several processes were used to maintain equality of voice including voting with sticky dots on a flipchart, small groups giving equal time for each person to speak, then collectively deciding on their actions, and individual assessment and ranking of best ideas to put into action. These group processes were a disruption to the organization's normal communication and decision-making patterns. The study also structured activities to reveal hidden differences and unknown innovations among participants. Several liberating structures activities including, 1-2-4-All, Conversation Café, Fishbowl User Experience, Wise Crowds, Appreciative Interviews, and 25-Gets-You-10 structured time to reflect silently on what they wanted to share before being influenced by others, and to listen intently on what others were saying (or writing). The Celebrity Interview/Fishbowl User Experience and Wise Crowds are two activities that were particularly effective at surfacing differences and innovations. Coherence was generated during group reflection as participants engaged in making sense of what they heard and learned. This collective understanding evolved to the generation of action plans to which there was a greater level of commitment.

The third goal of this research was to use study data to improve the LSPS model. Throughout the workshops the group reflected upon and gave feedback on the group processes. I learned activities they liked and thought were beneficial as well as ways to improve both the project and the LSPS model. I also recorded analytic memos as I

reflected upon activities after the workshops. Participants provided information to improve the execution of the project as well as ways to further refine the LSPS model. The headlines for project improvement include: 1) to more clearly link activities with larger goals of the study reminding participants what we are trying to achieve and to repeat often and, 2) schedule the workshops closer together and structure betweenworkshop communication to keep the initiative more alive and top-of-mind. There were three main ideas identified for model refinement: 1) expand power-balancing activities, 2) design into every workshop requisite communication skills-building activities, and 3) hold regularly-scheduled dialogic events. These ideas will be further developed in chapter six.

A Look at the Research Questions

The central research question guiding this study was, "in what ways does the LSPS model as a dialogic OD approach foster enabling conditions for the emergence of learning, adaptability and change within a hierarchically structured organization?" Table 12 summarizes the headline results of the research questions displayed in its entirety on the next page.

Table 12

Research Question Summary

Research Question 1 What did participants learn?	Research Question 2 In what ways did participants		Research Question 3 What was the impact on the			
what did participants feath.	change?		organization?			
Everyone is Valuable	Closer Personal Connections		Tool Reorganization			
Including everyone expands	Developed more respectful and		Tools systematically reorganized			
learning and produces positive	trusting relationships		with dramatic cost reduction			
outcomes	Improved Communication		New Interdepartmental Month			
Everyone Needs to be Heard	The quality of conversations		Meetings			
Need regular events dedicated to	improved and some had more		Established new monthly			
companywide communication	courageous conversations		meetings including more people			
for organization to function	Optimism		to share, listen and learn			
properly	Renewed Sense of Pos					
Research Question 4						
How could the project or LSPS model be improved?						
What Worked: Liberat	0 I		0 1			
Including diverse particip						
Activities structured for elistening	were d		hops intervals too long – Saturdays lifficult			
 Exploring individual and 			d more clarity linking activities			
purpose	with "end game"		C			
Recommendations for Improving Project						
 More clarity linking activities with larger goals of study reminding participants what we are trying to achieve 						
Schedule workshops closer together and hold during work week						
Recommendations for Improving LSPS Model						
Expand power-balancing activities						
Design into every workshop requisite communication skills-building activities						
Hold regularly-scheduled dialogic events Hold regularly-scheduled dialogic events House House House House House						
Unexpected Theme Unrelated to Research Questions In-group/Outgroup						
• Family/Non-Family						
Male/Female						

RQ1): What Did Participants Learn?

Everyone is valuable. Including everyone expands learning and produces positive outcomes. Through the workshop activities, participants learned about each other's specific jobs as they shared successes and challenges. As a result, they gained an appreciation for the work others are doing and began to see each other differently. They also discovered how interdependent and interconnected they are. The activities were designed to highlight different parts of the organization, helping shed light on each

person's work and how it impacts everyone else. In group process reflections, every group mentioned the value of hearing diverse perspectives. As participants heard from the various organizational functions including quality, tooling and fabrication, shipping and logistics, engineering, and leadership, their understanding of the business improved. They acknowledged how each department and person was critical to the proper functioning of all the other parts of the organization.

Owner comments

- "There is a wealth of resources in the company".
- "There is latent talent in the quiet people".
- "There are a lot of people who want to do more ... there is a willingness I didn't see before".
- "Every aspect of the company is important like engineering and shipping I
 wouldn't have thought much about how those two go hand-in-hand, but it does".

Administrator comments

- "This is a company full of masters that can handle whatever comes to them".
- "People were coming from different places but want the same things".
- "I learned a lot from people saying what their own concerns with their work were
 ... it's good to hear it and it just kind of helps fill things out".
- "I have a better understanding of the business".

Production worker comments

• "I felt like I had something to offer the company".

Everyone needs to be heard. There was widespread agreement that including people from different organizational functions was beneficial. Inviting people from all

parts of the organization to participate in the workshops changed the information shared, what issues were discussed and what actions were ultimately taken. Overwhelmingly, participants expressed both in the group reflections and individual interviews the need for regularly scheduled events dedicated to getting everyone together to communicate. Participants identified the biggest barrier to their change initiative of "Surfing the Wave" as the flow of communication within the organization. Participants collectively agreed that communication is an area they want to improve. Participants also expressed the desire to better understand the bigger picture and corporate strategic direction.

Owner comments

- "I learned that we have to get out of our day-to-day and tackle some of the issues we have and include everybody".
- "I see myself more valuable, in that, it was them and us and I walked away [after the workshops] just sensing that it's us now. I felt more a part of it".
- If communication isn't structured, "you can drift away from it".
- "We need to slow down and connect at a deeper level".

Administrator comments

- "This is necessary. It doesn't happen by itself".
- One administrator described why the tool reorganization was a success,

"[Female production worker name] was willing to help [male production worker name] out because she was in the meeting. She was part of coming up with the whole idea. She understood exactly what needed to be done and she knows where the things are. She knew exactly how to make it work. We need to create more of this when everybody

gets to know the bigger picture of what is it we are trying to do; what is it we want to accomplish."

• "Having an actual structured approach like this is advantageous".

Production worker comments

- "I think pulling people together like this people that care it feels good to do that in any aspect because usually it's all about work and getting the job done and getting it done right. And here was kind of discussing why we want to make things better because we do enjoy what we are doing. And I think that was a good feeling for everybody. That doesn't happen very often".
- These events "opened up new channels of communication. There are a lot more ways to collaborate".
- "We are actually attending *this* to focus on *this*. Where that came into play was with upper management ... this [workshop] made it the number one most important thing that was happening at that point in time".

Post-project interviews shed more light on the evolution of people's understanding of the need for consistent companywide communication events.

RQ2) In What Ways Did Participants Change?

Some participants described changes in their understanding, but couldn't necessarily pinpoint any changes in their daily work lives. Other participants described both changes in their thinking and their behavior. Three primary themes emerged as participants were asked if and how they changed: 1) closer personal connections and 2) improved communication and 3) a renewed sense of possibility.

Closer personal connections. Participants expressed an appreciation for getting to know others on a more personal level. A higher level of respect, trust and patience were described by some participants.

Owner comments

- There is "definitely a better cohesiveness. There's teambuilding that's more of a gamey nature, but I think we went really in depth with learning about the person and their goals and it got really intimate with certain people ... that built more cohesion than, for example, a Christmas party once [where] we did go-cart racing. Not everybody liked that".
- "I learned the importance of trusting the group."
- "...the way people just shared and what they were willing to contribute I think it just meant a lot. It just made me feel more honored that we are a part of this.
 We're stronger for it. I really feel that. There's definitely been a strengthening.
 You made everyone feel listened to ... It's how we are together. No matter what widget we're making, if we don't have relationships with our people, what good is any of it?"
- "... what I've noticed in the group is a sense of respect. I think a lot of them felt like they were a part of something bigger than what they thought. You know it's one thing to come to work every day and punch in and punch out and go home.

 But it's another thing to be asked questions about what do you think about the job?"
- "I have seen everybody be just a little bit more vulnerable".
- "We have evolved emotionally as an organization".

Administrator comments

- "It reminded different divisions that we care about each other ... Anytime you do something like this, unspoken bonds develop".
- "human interaction is beneficial to building connections".
- "There is more respect between departments".

Production worker comments

• "It was really cool to be able to come together and be able to talk openly as a team...we felt like we had attention and support for the things we were saying. I finally felt appreciated in that workshop".

Improvement in communication. Participants described in various forms, the change in the quality of communication between people in the organization. Several participants mentioned the willingness to have courageous conversations with each other.

Owner comments

- One owner described extensions of conversations to the board of directors,
 "we have had more discussions ... some of them not all rosey, but I think we have
 confronted some things that were bothering some people and there was more of a
 willingness to have those difficult discussions because we had gone through the
 exercise of sitting down and having some of these more intimate conversations as
 an organization".
- "It's very tangible that the group has advanced its ability to communicate and therefore problem-solve or make intelligent decisions as a group".

Administrator comments

 "I noticed an evolution in the type of conversations that people were bringing out".

Production worker comments

- "I've learned to focus a little better on my communication skills and ... find nonconfrontational ways to get people to understand what I'm talking about".
- "There were several people in our group that were either doing the realizing or noticing the realizing (in others). When we discussed the topics about the tuning, listening and talking, there were people who realized, yeah you can make time for this along the way. There were those people that noticed those people realizing that maybe they don't do enough of that".

Optimism. Participants expressed a renewed sense of possibility for themselves and for the organization.

Owner comments

- "Everyone that participated got the first glimpse of this realm of possibilities and opportunities".
- "For me what I want to develop now because I was exposed to it from these workshops – if I could develop my ability to get people to talk in that way, then we've got something".
- "We can be a part of a different way of working together".
- "I saw a different way of being with a team".
- "In general, it motivated me more ... we have high hopes for this company and sometimes get frustrated with the pace ... but through this it gave me another perspective that pulled us out of the day-to-day and it was a refreshing look" at all we have done and "all the talent we have and then towards the end, some of the successes we had. That was definitely motivating".

- "It was more of a reinforcing or reinvigorating or reawakening. You're like hey, don't forget you should be doing these things".
- "... in terms of my personal journey throughout this year in the company, it has helped me to feel more sovereign. It helped me analyze my own observations ... it helped me to get a clearer vision of what I want to get done".
- One owner described how he was now more focused on the 'whys' of the
 organization, wanting to dig more deeply into personal and organizational
 purpose. He also described a renewed focus on people's and the company's
 strengths and the desire to better align them.

Administrator comments

- "It's kind of like a little window to what's possible with humans here".
- "I have a more positive outlook on what's possible".

Production worker comments

 "I felt like they heard me and they appreciated what I was saying and you know there is a lot of room for me to become what I'm wanting to be as far as this company is concerned".

RQ3) What, if any, Was the Impact on the Organization?

Tool reorganization. The operations action plan developed by owners, administrators and most importantly, production workers at the second workshop resulted in outcomes that surprised everyone. No one realized the full impact until everyone had an opportunity to share their stories with the whole group. The company was spending on average \$22,000 every month to buy tools prior to this study. Post Workshop Two when the operations action plan was developed, the very next month, the cost of tools dropped

to \$9,000, a reduction of 59%. The CFO thought it was a fluke and waited for a late bill to come in or an increase in tooling costs the next month, but this reduction in tooling costs was sustained for the following two months (until the time of this writing).

Previously, management had initiated a project to control the tools under lock and key, but it didn't solve the problem and the project was suspended. The impact this project had is reflected in the following comments.

Owner comments

• "That top-down approach wasn't getting anyone anywhere".

Administrator comments

- "There were attempts to actually reduce the costs of those tools but nobody knew how".
- "The evidence is overwhelming" [on the impact of these workshops].
- The tool reorganization "has had a dramatic effect on how we interact, because life in general is easier".

New interdepartmental monthly meetings. The workshops were designed for new patterns of communication and interaction to be practiced including sharing perspectives, successes and challenges, listening to others and asking for help, among other things. The human dynamics action plan was adapted to structure space and time for this to happen on a regular basis. The number of people invited to this meeting was expanded to include representation from more places within the company. The rationale was to start small and grow it as the first human dynamics plan the group developed was "too big to manage".

Owner comments

- "As a family we spend a lot of time talking about these things, but we never meet with the whole group or a subset of the group. That concept of looking at it and actually brainstorming with people from every aspect of the organization is huge. That's the invaluable part. Having that whole other perception from the people that are actually there is critical. We need to figure out how to do that".
- "I think more than anything just having people together and hearing it, everybody
 has a better understanding of everyone else and you can't really do that by just
 pointing at an org chart. You have to actually be with the person and see their
 personality and how they affect each other on their aspects [of the company].
 Being there and actually being able to witness it that's pretty important".

Administrator comments

- "Taking the time to identify what we could be doing better. I don't know that it's very important if we find the solution, but it's very important that we take the time out of the day and identify what's working and what's not working. Now maybe we have some tools ... to identify those problems".
- "The company has realized that they need to meet regularly. They have to plan in advance. They need to reflect on what was done and what was agreed upon and find ways to improve. I think the impact is huge".

Production worker comments

• "We are actually attending *this* to focus on *this*. Where that came into play was with upper management. Like I said they're so busy. When somebody comes to them with an issue, they're listening but they are not entirely present in the

conversation. They care about what you are saying but it's not really as important as the other things that need to be happening at that time. This [workshop] made it the number one most important thing that was happening at that point in time".

- "I think that a lot of the things that people thought they got out of it [the workshop], they did feel heard for that one day for those few hours. I think that's something that could change because it was positive".
- "I think it caused them (owners) to hear things they normally wouldn't hear".

RQ4) In What Ways Could the LSPS Model or Project Be Improved?

One of the objectives of the study was to create a psychologically safe environment; a safe container where all voices were heard and people felt free to express their thoughts. I asked participants during the interviews if they felt safe, valued and included. I also asked if there was anything that caused them to feel unsafe, not valued or excluded. Participants expressed both liberating and limiting aspects to the workshop environment. Some comments extended to the overall work environment.

Liberating aspects of container. Specifically referencing the psychological environment of the workshops, participants felt included, safe and respected.

Owner comments

- "Everyone felt safe. There was no stratifying going on".
- "The platform was very equal. It was helpful to have an outsider present".
- "You (facilitator) personally made it very easy and made everyone feel equal.
 Owners didn't get more podium and that's really impressive".
- "I have never seen *administrator name* and *production worker name* speak up that much".

Administrator comments

• "Everybody got to express themselves and say what needed to be said".

Production worker comments

• "It was good to eliminate formal job titles and approach each other as equals.

There was the removal of the hats".

Limiting aspects of container. There were aspects to the workshops that people did not feel comfortable talking about in front of particular people. The responses that were shared revealed that the every-day psychological environment of the organization may not be completely safe to be fully transparent. The following comments come from owners, administrators and production workers and are not identified by job function to ensure anonymity of the participants.

- "The first session was tough because they [we] were getting to know each other".
- "I felt a duty to come here. I was never excited to come here because of all the pressure. Being with people I never work with was difficult".
- "You feel like an outsider when you're not a part of the family".
- "Did I feel safe? Yes, and then in the back of my mind I'm thinking there is a lot of transformation going on in this company, so there was a little hesitation".
- "I had a fear of divulging too much and losing my job not that I had anything bad to say. There is some self-censorship there. You have to check what you are going to say because people react defensively".
- "They [lower level employees] would have been a little bit more honest if the bosses weren't in the room".

Aspects of Group Processes that Worked

All of the participants expressed several ideas about the positive aspects of this study and shared ideas on specific things they particularly appreciated. The responses can be grouped into three main ideas: 1) the inclusion of diverse participants, 2) activities structured for equal sharing and listening, and 3) exploring individual and collective purpose.

Including diverse participants. Overwhelmingly participants expressed appreciation for having people from all parts of the organization present for all the work done in the workshops throughout the study. A majority of participants mentioned how their understanding of the business and each other was greatly expanded by including people from all functional levels.

Activities structured for equal sharing and listening. All the liberating structures activities are designed for participative sharing and listening, however those designed for listening were mentioned by a few as very beneficial for their group. One participant stated, "The techniques that forced people to *not* talk were the most valuable ones". This participant was referring specifically to the *Fishbowl User Experience* and *Conversation Café* that used a talking stick. *1-2-4-All* and *Appreciative Interviews* were also mentioned as effective for listening to each other.

The Generative Relationships STAR activity was one of the most appreciated activities as it enabled participants to be able to plot on their own individual graphic sheet their perceptions of where the organization was situated along a spectrum of four dimensions including 1) separateness, 2) tuning, talking and listening, 3) action and 4) reason to work together. The participants then had the opportunity to share their results

with each other in small groups, agree on a group plotting and compare their results on a large flipchart with the larger group. This helped everyone have a larger perspective of their ideas relative to others and opened up new conversations.

The *Positive Gossip* activity at the conclusion of Workshop Three structured sharing appreciative feedback to participants for the positive qualities they brought to the workshops. One participant said,

"By putting so much thought into the individuals in the room when you gave them your undivided focus in front of everybody, it was... a nice way to tie up those three workshops. So I don't know where the research is on that kind of stuff but it worked. A lot of people just remember that and I've already heard people talking and I think that went really far".

Another participant said, "The round of appreciation you did really opened hearts and doors. There are some people I have never seen so radiant after just being appreciated in the way you appreciated them".

The 25 Gets You 10 idea generation, evaluation and selection activity draws upon an individual's thoughtful written ideas displayed as a visual array ranked in order of attractiveness by the group. This activity essentially crowd-sources compelling ideas where authors are anonymous and allows the best ideas to rise to the top. It is an activity that listens intently to participants and gives each person equal power in sorting out the very best ideas that are moved into some form of action. This activity also demonstrated unity of thought around what needed to be done. One participant said, "It's a good way to remind people you're all kind of thinking the same thing; you're just saying it differently".

Exploring individual and organizational purpose. In reference to the *Nine Whys* activity which asked participants to describe how their purpose benefits the organization, one participant stated, "I thought, I've got nothing to share ... and in the conversation (with partner) I realized I have a very clear purpose".

Aspects of Group Processes that Didn't Work

Participant self-censorship in larger group. Several participants from both the administrative and production worker job functions expressed the inclination to be reserved and "silent" at times when in the presence of some of the owners. These are the invisible, yet ever-present power dynamics that cannot be completely leveled even with structures that design equality of participation and equal say in decision-making. This will be addressed in recommendations to improve the LSPS model.

More clarity around purpose and "end game". When asked how this project could be improved, a majority of participants mentioned putting more context up front about better-framing the end game. Participants expressed a more clear linkage defined between what we were doing and the benefits throughout the study.

Owner comments

- Circle around to what the problems were "to remind people we are here to solve this...try to put more color around where everybody is going over the course of the workshops. The only reason that comes to mind is that maybe it gives the participants sort of a license to advocate for themselves more and speak up. I think it would empower people to start driving the process".
- "We could have spent a little bit more time understanding why we were here...and then tell us repeatedly why we are here" [smiling].

Production worker comments

"I think it lacked a little bit of where are we going? Up front, it's like here's what we want to achieve, but it was really like going at it but there was no goal in sight ... If you would have come in on the first one and said here's what we're trying to end up with, so I can say okay, are we getting there? Are we moving in the right direction? Is this working? What you were attempting to do was very good. But I think a little more upfront about what it was that you were attempting to actually end up with might've been a little better".

Workshop intervals too long – Saturdays were difficult to attend. The three workshops were spaced three months apart. Several people mentioned that the time between the workshops (three months) was too long. It would have been helpful to have them spaced closer together as one participant reminded me, "it's necessary because you forget". Suggestions were made to have more communication in between workshops for better follow up. An owner suggested a second half-day workshop immediately following each workshop to "reinforce what was agreed upon and hold leadership accountable". Additionally, the workshops were held on Saturday mornings beginning at 8:00 am. Several people suggested that this was inconvenient and cuts into their family and personal time. Scheduling workshops during the regular workweek was offered as a solution.

Recommendations for Improving the Project

Participant feedback on how to improve the execution of the project can be summarized into two main ideas: 1) make clearer links between activities and the larger study goals reminding participants of what they are trying to achieve, and 2) schedule

workshops closer together and hold during the work week. These ideas will be further discussed in chapter six.

Recommendations for Improving the LSPS Model

Drawing upon the body of data and participant feedback, three central ideas emerged on how to improve the LSPS model: 1) expand power-balancing activities, 2) design into every workshop requisite communication skills-building activities, and 3) hold regularly-scheduled dialogic events. These model-refinements will be further elaborated upon in chapter six.

Unexpected Theme Unrelated to Research Questions. Throughout all sources of data, but most notably from the interviews, the presence of an in-group/outgroup culture emerged. This divide took two primary dimensions. The first was family/non-family and the second was male/female. The following comments are not broken down by job function to protect anonymity, but include comments from all job functions.

- "...they're [family] very tight-knit and untrusting of outsiders. They kind of foster that environment".
- "I felt like an outsider. I didn't feel a part of the team".
- "Being a female ... you seek approval. That's just something we're born with I
 think" [on seeking approval from leadership].
- "... some of them [employees in general] think I'm just a clerk. I ask someone a question [for their opinion] and they turn to the man who is standing next to me" [for the answer].

"In this environment – you know what it's like – the touchy-feely stuff – it's minimized. It's female, it's soft, it's irrelevant, you know? And yet, it's everything".

Conclusion

This chapter provided an overview of the study, its goals and how they were met. Each of the research questions was addressed and the findings were presented, suffused with participant quotes to convey an authentic and human voice within the results. The findings presented some useful and beneficial outcomes as well as constructive ideas to improve the project execution and model refinement. An unexpected theme emerged from the data that invites a deeper exploration in the future. A discussion of the findings related to the research questions, study limitations, implications, learnings and recommendations for future research follow in chapter six.

Chapter 6. Discussion and Conclusion

Introduction

This chapter will briefly summarize the theoretical framework of the study, discuss the importance of the findings as related to the research problem, mention study limitations, consider implications and offer learnings and recommendations for future research.

Review of Theoretical Framework

This study was built upon several, somewhat overlapping yet integrated theoretical frameworks including social constructionism, complex adaptive systems theory, and liberating structures as dialogic OD within a problem-solving structure. A quick review is in order before discussing the findings.

Social constructionism. There are four pillars of social constructionism based upon the work of Gergen (1982), Sarbin (1986), and Shotter (1994). The first is *meaning is constructed through social interactions*. The implications of this for any change practitioner are to be mindful that knowledge is a communal production and it is through human interaction that meaning is constructed. The second pillar is *what is good/right/true is a social agreement*. Through social interaction, communities agree upon what values and principles are valid. The implications for a change practitioner are to be cognizant of what narratives are unquestioningly privileged and those which are marginalized. The third pillar is *our language and interactions are central to social construction*. Discourse either shapes or challenges the ways organizations are structured, maintained and transformed. Conversations continually contribute to social interpretations that either limit or advance what is thought possible. The implication for a

change practitioner is to understand the central role dialogue plays in a collective reinterpretation of what is possible. The fourth pillar is *knowledge and action are linked*. From this understanding, by first taking action on the things we care about and then making time to reflect on that action, both individually and collectively, knowledge becomes an active social achievement. The implication for this study was to structure action first, in the form of practicing new communication and decision-making patterns rather than try to 'teach' participants how to do it. Time was subsequently made for participants to reflect on their interactions where they engaged in meaning-making conversations about their experiences (Bushe & Marshak, 2015).

Complex adaptive systems theory. Discovering how complexity theory operates within organizations is ongoing and this project draws upon many overlapping ideas from Kauffman, (1995), Stacey (1996), Wheatley (2006) and Holman (2010). Complexity theory says that systems will self-organize under a few simple conditions including a relatively safe environment and an ample amount of diversity. Stacey adds upon this stating that paradox and creative destruction are a part of creating order (1996). Wheatley further extended the conversation to include essential principles of complexity science in organizations: participative processes lead to a richer, more diverse and vital organization, relationships are indispensable to creating structures that work, and autonomy and self-reference, with a strong frame of reference, generate coherence and continuity (2006). Holman further advanced the conversation by identifying a three-phase pattern of emergence including a disruption of the status quo, surfacing differences and finding coherence together (2010). For this process to occur Holman described three activities to support engagement throughout this process. The first activity is creating a

container that is welcoming, invites diversity and asks possibility-oriented questions. The second activity is creating opportunities for individual expression and connection which generate differentiation. The third activity is reflecting to find meaning and coherence together (Holman, 2015). This study was designed to include all three of these activities conducive to emergence.

Dialogic OD. A dialogic OD mindset assumes organizations are socially constructed realities that undergo continuous processes of self-organization in which meaning-making is perpetually created, maintained, and re-created through diverse narratives, conversations, images, and symbols. One of the goals of this research was to create a safe container in which people from all parts of the organization could have new conversations through facilitated interactions intended to open new ways of thinking that lead to the emergence of transformational change. This is accomplished, in part, by including greater diversity into ongoing interactions and shifting the discussions from problems to possibilities by using generative questions. As people construct new shared realities and strengthen their interpersonal relationships through a dialogic practice, they are better poised to commit to and engage in the continual work of change.

Liberating structures as a dialogic approach within a problem-solving structure. Liberating structures are a dialogic approach to leading change within an organization and are developmental by design. They are practical group facilitation methods designed in alignment with the principles of social constructionism, complexity theory and dialogic OD theory. The Liberating Structures Problem Solving model is based upon nine core principles and practices. The four core principles include pursuing justice, seeking truth, believing in nobility and assuming interconnectedness. The five

core practices include creating a container tending to both physical and psychological aspects, addressing purpose and vision, cultivating unity, building individual capabilities and developing organizational adaptability. These principles informed the design of each of the liberating structures used in this study. The nine-step problem solving steps provided a structured approach for the progression of each of the three workshops. The steps included, 1) defining the problem, 2) identifying criteria for evaluating solutions, 3) identifying root causes, 4) generating alternative solutions, 5) evaluating solutions, 6) selecting the best solutions, 7) developing an action plan, 8) implementing the action plan and 9) evaluating outcomes and the process (Dewey, 1971).

Discussion of Findings

The findings of the study are summarized in Table 13 shown in its entirety on the next page.

Table 13
Summary Findings

Research Question 1	Research Question 2		Research Question 3
What did participants learn?	In what ways did participants		What was the impact on the
	change?		organization?
Everyone is Valuable	Closer Personal Connections		Tool Reorganization
Including everyone expands	Developed more respectful and		Tools systematically reorganized
learning and produces positive	trusting relationships		with dramatic cost reduction
outcomes	Improved Communication		New Interdepartmental Month
Everyone Needs to be Heard The quality of conversations		Meetings	
Need regular events dedicated to	improved and some had more		Established new monthly
companywide communication	courageous conversations		meetings including more people
for organization to function	Optimism		to share, listen and learn
properly	Renewed Sense of Possibility		
Research Question 4			
How could the project or LSPS model be improved?			
What Worked: Liberating Aspects What Die		ln't Work: Limiting Aspects	
 Including diverse participants 		Participant self-censorship in larger group	
 Activities structured for equal sharing and listening 		 Workshops intervals too long – Saturdays were difficult 	
 Exploring individual and organizational purpose 		 Needed more clarity linking activities with "end game" 	
Recommendations for Improving Project			
 More clarity linking activities with larger goals of study reminding participants what we are trying to achieve 			
Schedule workshops closer together and hold during work week			
Recommendations for Improving LSPS Model			
Expand power-balancing activities			
 Design into every workshop requisite communication skills-building activities 			
Hold regularly-scheduled dialogic events			
Unexpected Theme Unrelated to Research Questions			
In-group/Outgroup			
Family/Non-Family			
Male/Female			

This study was interested in addressing the problem of including and engaging diverse participants in a power-with dialogic OD approach while working within a hierarchical structure designed for exclusion and power-over. As participants practiced these dialogic processes through a problem-solving process using liberating structures, did they experience transformational change? What did they learn? How, if at all, did they change? How was the organization impacted? How can the LSPS model and project be improved? A discussion of the study's findings to each of these questions follows.

All of the findings suggest a higher level of consciousness by participants of the organization and how work is accomplished together; how interconnected they are as every person's work is integral to the success of everyone else; how different they are; how similar they are; how human they are; how they wish to be heard and appreciated; how each has a deeper purpose that impels them forward; how they seek personal development and wish to contribute their unique talents to help propel the company forward. There are some divides that emerged from the data and will need to be addressed for the organization to realize its full potential. The discussion will first address the findings as related to the research questions and will touch upon the unexpected theme that was revealed within the data.

RQ1) What did participants learn?

Everyone is valuable. This statement perhaps seems obvious, yet every participant mentioned some version of this. Why? It was apparent after the first activity (*Celebrity Interview/Fishbowl User Experience*) designed for whole group sharing, listening and learning in Workshop One that this was a new practice for the organization. The curiosity expressed through asking questions of those who had shared their perspectives demonstrated a collective sense of how important it was to understand other people's work and how they experienced it. Through group reflection, I learned that in the past the organization had invited "all-hands" for an event like a "state of the union" meeting. These were structured with a one-to-all approach as leadership communicated with everyone pressing organizational issues. It was revealed that these meetings were well-received, but ended up being suspended due to the demands of exponential business growth. The various workshop activities used throughout this study, which structured

space and time for diverse perspectives to be aired, seemed to re-awaken a desire from participants for more of this kind of communication and interaction. Most participants expressed an appreciation for what other people did in their work as well as the successes and challenges they experienced. Every workshop structured activities to disrupt normal communication processes and amplify differences before seeking coherence; the three conditions needed for emergence (Holman, 2015). Inherently, there appears to be a desire to find the coherence in the midst of differences. As one participant commented after the *Shift and Share* activity.

"I noticed [something] that kind of struck me ... when we went around to the different groups, it seemed like we didn't even work at the same company. Everybody had their own perception of what the company was and what their job was ... somehow we need to get that bonded together."

These processes invited participants who are normally not heard from at the whole-group level to share their perspectives and experiences which generated more valid information (Schwarz, 2002) for the group to consider. These more democratic group processes valued their voices as equal to all other voices. Lipmanowicz and McCandless' first guiding principle is to *include and unleash everyone* by inviting all who are touched by a challenge to either share solutions or to be a part of inventing new solutions together. By shining a light on those not often heard, these activities also demonstrate *deep respect for people and local solutions*, the second guiding principle of liberating structures (Lipmanowicz & McCandless, 2013). Wheatley asserts that creating space for multiple perspectives to be heard broadens the field of possibility as new information and people generate multiple interpretations of what is happening and what

needs to be accomplished (2006). As new voices were heard, greater awareness and understanding began to take shape. Many participants throughout this study expressed an appreciation for the ability to participate in learning from others and the opportunity to share and be a part of shaping the next steps moving forward.

Everyone needs to be heard. Overwhelmingly participants acknowledged the benefits of interacting with and learning about other people and what they do in the company. This allowed people to get a better idea of how their work is intricately linked to every other person's work and is integral to the proper functioning of the company. Commensurate with this understanding was the desire for regular events dedicated to companywide communication.

When I first communicated with two of the company's owners to discuss their desired outcomes for this study, they listed *building a greater sense of ownership and commitment* as one of their objectives. As the study progressed, everyone, but most especially the owners, witnessed the depth of care and concern that people held for their work and each other. Many owners expressed throughout the workshops and interviews their surprise and appreciation for that level of commitment from employees. So what was the disconnect if people already possessed this care, concern, sense of ownership and pride in their work? The answer lies in the structural nature of hierarchy which, by design, results in communication breakdowns (Spillan, Mino, & Rowles, 2002). In a hierarchical structure people are focused on their areas of expertise resulting in isolated departments and poor communication and coordination (Garvin, 1998). The upward flow of communication in hierarchy is extremely limited as there are no formal channels for listening and feedback. This study removed many of the structural sources of conflict and

allowed people to see and hear each other. At the outset of the study, the owners seemed to be searching for ways to improve employees' attitudes and commitment to their jobs. These structured activities designed for listening and learning revealed that it was not the employees' attitudes that were the problem, but instead what was missing was the opportunity for communicating about the very real issues and challenges they face every day. As space and time were opened for these types of exchanges to occur, I saw people highly interested in learning more from each other about what was actually going on.

I also observed people's natural inclination to self-organize as multiple participants expressed, not just the desire, but the need for regularly scheduled events dedicated to companywide communication. Through this expression, participants identified the need for inclusion of diversity, a necessary condition for self-organization (Owen, 1998). This demonstrates the group's ability to think systemically by putting into place new structures that disrupt the status quo, allow differences to become visible and make space for coherence to develop. An example of coherence developing through meaning-making conversations follows. The *Generative Relationships STAR* activity revealed the organization scored low on the *Talking, Tuning and Listening* dimension. During the group reflection, an exchange occurred between two owners and a production worker. After stating that the *Action* dimension was his biggest concern, one owner stated,

"the tuning, the talking, I think we all have to agree that's the low one. It's always going to be low. I don't think we can change that one. But our action and opportunities, we have the opportunities to fix it". Another owner interjected, "Can I disagree with that? This meeting for me, is the complete proven evidence

that we can. Because we are in a crazy phase and we managed to all be here, so it's possible, we just forced it and you just show up. I do think it's possible". A production worker immediately added, "I think when you force it; schedule reflection time, you create the opportunity for action".

This conversation demonstrates the evolution of ideas and sense making that occur in dialogue as coherence manifests in a higher collective awareness. This conversation was enriched because people from all parts of the organization had the opportunity to participate. Every voice counted and raised the level of discourse.

RQ2) In What Ways Did Participants Change?

Closer personal connections. Throughout the study, participants had multiple opportunities to engage in one-on-one and small group activities for sharing, listening, learning and exploring new ideas together. These interactions generated closer personal connections, even for those participants who were uncomfortable with interacting with people whom they did not know very well. Participants expressed higher levels of respect, patience and trust as ways in which they had changed which contributed to closer interpersonal relationships. Throughout the workshops, I noticed the high degree of engagement as people sat knee-to-knee or in small groups, often leaning in, immersed in either listening or sharing. Given that the workshops were scheduled on Saturday mornings starting at 8:00 a.m., a regular day off for many participants, I would not have been surprised to see a lack of engagement or energy from some participants, but I did not witness this in any of the workshops. Everyone appeared to be genuinely engaged with each other as they participated in meaningful conversations. Ledwith & Springett (2010) describe participation as a transformative concept (p. 13). As people engage in

participatory practice, it builds relations of trust and integrity that "heal the fractures created by our contemporary western worldview" that assumes a top-down view of the world privileging notions of superiority and inferiority (p. 189). Making simple and elegant changes in the microstructures that invite and value each person's voice allowed a much more human-to-human interaction to occur. One owner mentioned that the small change of getting people to meet outside of the normal work day where everyone dressed casually was beneficial to more open and honest communication because and it eliminated some of the invisible forms of hierarchy that influence what is discussed. A production worker echoed those sentiments saying that "removal of the hats" was conducive to opening a broader range of conversations. Every liberating structure included an invitation to seek out someone to interact with whom they knew the least. This small change had the effect of flattening the hierarchy by creating exchanges between diverse participants on a more equal platform and arguably generated richer data that ultimately led to more significant outcomes.



Figure 12 Image of Participants during Workshop One

One of the activities merging Appreciative Inquiry with Nine Whys was intended to get people talking in pairs about an accomplishment they were really proud of or how they were able to overcome adversity in some way. They subsequently had a conversation about why that was important to them. The activity opened space to go deep and touch upon personal purpose. The activity then structured people to get into groups of four and identify any themes that bubbled up as to how personal purpose benefits the organization. Perhaps I wasn't clear in my initial instructions, but what came next was better than my plan. As I asked the small groups to report to the whole group, an owner started by identifying his partner (production worker) and describing with genuine appreciation how his partner's purpose benefitted the organization quoting him directly. It instantly became a sharing activity of each person's unique contributions to the organization as partners lifted up and praised each other's attributes to the whole group. One owner described her response to what an administrator had said, "I was spiritually drooling over what he was saying ... as he created this vision ... why work is service. Obviously, on what other platform would he have been able to share that with this company? For me that was truly remarkable".

Going with the conversational flow, this activity took more time and I had to adjust the other activities around what had emerged. I would do it all over again because in many ways the group needed to get to know each other at deeper levels. Every activity, as Lipmanowicz and McCandless' third guiding principle states, builds trust along the way and contributes to developing closer personal connections.

Improvement in communication. Dialogue lies at the heart of a participatory practice that invites diversity (Ledwith & Springett, 2010). It plays a critical role in the

building of trust. When dialogue is absent, a culture of conflict is reinforced that promotes an 'us versus them' mentality (p. 127). Ledwith & Springett (2010) go on to say,

A dialogical approach to change and transformation is as much about listening as talking, and as much about dissent as about consensus; the outcome is always increased understanding and acceptance of difference, and in the best cases leads to mutual action.

As I reflect on this, two thoughts occur to me. The first is that people in general, but especially leaders, are expected to know, understand and competently facilitate group dialogue. I often hear leaders talk of their responsibility to, for example, increase employee engagement or the need to constantly spur innovation, yet they are constrained by an inherited hierarchy and its mindset that suppress those very processes. I designed this study to give participants an opportunity to practice different ways of working together knowing it was likely a new experience to most participants. I was not interested in teaching them about these processes to change their minds. Instead, I wanted participants to have the experience first and then to reflect on it just as Owen suggested, "nothing compares with the experience. Words that come afterwards as a reflection and deepening of the experience really seem to work" (as cited in Bushe & Marshak, 2015, p. 136).

Overall, the responses were very positive to the dialogic approach to change that included and structured equal participation where every voice was heard with the same value. It seems obvious to me that including diverse participants will enhance everyone's ability to critically think because they will invariably be exposed to very different ideas requiring more thoughtful consideration. Ultimately, better decisions will be made as

more information helps put things in context and weed out bad ideas. Not everyone thinks this way obviously and I have to remember that I have this understanding because I have studied it intensely. Looking back on the educational curriculum I experienced in my developmental years, nowhere did I receive any instruction, much less training in how to engage in effective group dialogue. I think this is significant because in today's interconnected world people must work together effectively across a multitude of divides including organizational, cultural, racial, gender, economic, religious and geo-political to mention just a few.

Hierarchical structures (most often inherited) set leaders up for failure. Developing a participatory world view (such as the dialogic OD mindset) and a dialogic group practice are essential to individual and institutional success, yet our core educational curriculum omits this necessary aspect of human development. The result is countless people facing complex situations in organizational life that require knowledge and skills they have not been given the opportunity to adequately develop. In these situations, many people resort to what they know and see which is most often a hierarchical approach. Ledwith and Springett state the necessity of both listening and talking, of dissent and consensus as essential components of dialogue (2010), yet hierarchy removes the listening and dissenting components essential to dialogue and instead practices diagnosing and directing with the expectation of agreement and conformity. Hierarchy is a structure designed for efficiency and productivity in a bygone era that, when applied today, presents leaders with the paradoxical challenge of including and engaging others in a power-with approach within an exclusionary, power-over hierarchical structure. This sets leaders up for failure if they are not able to tap into the

informal adaptive human dynamics within the existing formal hierarchical structure.

Learning how to navigate these entangled functions between the two is needed and why this research is critical.

I designed this research to work within the space of possibility that emerges when the latent potentialities in humans have an opportunity to blossom while working within a hierarchical structure. Much of the hierarchy was removed for the short periods of time in each workshop. The participants showed and demonstrated a genuine willingness to engage. For those few short hours, I saw every participant give the processes a chance and open themselves up to new experiences. Several people from all job functions expressed a willingness to engage in courageous conversations beyond the workshops as a direct result of participating in the study. Schwarz describes one of his ground rules for facilitation as "discussing the undiscussables" (2002). People mentioned some of the new conversations they were beginning to have that they would not have had otherwise. I saw this play out in the last workshop where an administrator brought up a conflict that happened during the implementation phase stating that one of the owners said about the initiative, "we're not really going to do that". I later learned that there were some coordination details involved with implementation that required continued communication and apparently that didn't happen. However, the fact that an employee a little lower on the hierarchy felt safe enough to remind someone in a higher position of a collective agreement required some courage, but also indicated a belief that it was safe to do so and that leadership would listen. The status quo was disrupted with new dialogic group processes that activated in some, a willingness to address below-the-surface tensions that may not have been adequately dealt with in the past resulting in new

conversations that addressed more challenging issues. Every person in this study was caring and considerate of others and held high concern for the organization. The experience also gave some participants the ability to hold others accountable and say essentially, 'Hold up. We agreed on this'.

Optimism. Most participants expressed what can be described as an awakening to possibility. This was described as the possibility for greater personal development and a new way of working together. Without a doubt, the organization is brimming with people of great capacity. I remember feeling humbled and at times a little intimidated by the profound wisdom I heard come forth from quieter people as well as the more talkative people. Everyone had something valuable to contribute. I was not the only one who noticed the wisdom of others that transpired with an invitation and space to be heard. Participants had dedicated time to get to know each other better in a space designed for more equal footing and the "removal of the hats" which served to facilitate a more authentic interaction and often creative conversations. It is through this interaction designed for listening, sharing and reflecting together while addressing challenges that is a little bit messy and at times on the edge of chaos that gives people the space to explore. Holman acknowledges the challenge of supporting the "messy ebb and flow of creative endeavor" while trusting that order will appear (Holman, 2015). Stacey linked complexity science to organizational life saying,

left to self-organize in what looks like a mess with no apparent order, agents interacting in a system can produce, not anarchy, but creative new outcomes that none of them ever dreamed of ... The price is an inability to know the final destination or to be in control of the journey (1996, p. 13).

I sensed in people a willingness to accept not knowing what the final destination was and an optimism for the future and the potential of what could be.

RQ3) What, if any, Was the Impact on the Organization?

Tool reorganization. At workshop two, an operations action plan was developed by the group to reorganize the tools which was implemented immediately following the workshop. The next month, the tooling costs line item on the profit and loss statement were down by 59% representing an \$11,000 reduction in costs for the month. This result was questioned by the CFO who was waiting for another invoice to come in because the numbers were so low. The following month the tooling costs remained the same as the previous month representing another \$11,000 cost savings from historical averages. The CFO stated,

My biggest frustration in our company is our buildings are not conducive to having a central tool crib. I tried to work on it and it's one of those cases where top-down doesn't work. Bottom-up does. And that was a success story for me from these whole group meetings that we have been doing with you [gesturing to facilitator] that paid for everything. That's huge. We've already seen at least \$10,000 in tooling savings, not to mention that's going to be ongoing because *production worker name* is there – one of the guys is pushing it along. It's not me. I don't have to come in to push it.

This was the most tangible impact that this study had on the organization because it was measureable and generated significant cost savings that flowed to the bottom line to which the organization is highly attuned. In Workshop Two I structured an activity for designing a simple action plan in two areas: operations and human dynamics. People self-

selected which group they wanted to join. I gave them the criteria for an action plan and 20 minutes to complete the activity, which was extremely tight to do all that was required. The activity ended up taking 30 minutes including each group presenting to the whole group what they were going to do. I mention this here because this organization did not need an elaborate plan to implement. They were experiencing record volume and were stretched as far as they could go. The idea was to generate immediate action on a small problem that was manageable in their daily work. I told them it was their job to self-organize and include everyone. They did it. They owned it. They implemented it and it was highly successful.

The success of this specific action plan highlights two important concepts. The first is that action, any action however small, will generate momentum. Too often I have seen elaborate plans that get shelved because they are just too inaccessible in people's daily work, so nothing is accomplished. This concept is supported by complexity theory that a small change in conditions can lead to a large difference downstream (Gleick, 1987). The two production workers who helped design and implement the action plan understood what was possible within their normal routines and they ensured the plan was feasible and worked together to successfully implement the plan. The second important concept is inclusion of diverse participants in the process of shaping a change that impacts their work, a key element of participatory action research (Willis, 2007). The significance of this cannot be overstated. Several people in administration and leadership mentioned the previous failed attempts to solve the problem of tool organization from a top-down approach. The idea that someone at the top of the organization is the best source of expertise at solving a problem at the bottom of the hierarchy is a widespread

practice among many organizations. That is not to say that leadership does not contribute value to the process because of course they do. However, hierarchical planning and decision-making excludes from those processes the very people who have first-hand knowledge of the challenges and potential solutions. This concept was made clear through this action plan.

It should also be noted that the human dynamics action plan also generated in Workshop Two was not implemented. This was addressed during group reflection as we discussed why it stalled out and eventually made plans to adapt the plan to be more manageable. I mentioned to the group Lipmanowicz and McCandless' fourth guiding principle of *learning by failing forward* to normalize and make safe stumbles in our attempts to make progress. Demonstrating an ability to take a critical look at the problem without targeting people was something I was cognizant of throughout the workshops to ensure the environment was always psychologically safe. This allowed the group to stay engaged and creative in co-developing something new that would work.

New interdepartmental monthly meetings. As noted earlier in the findings, what most participants learned was the need for a regularly scheduled event dedicated to companywide communication. This learning translated to the creation of a structural change in the way the organization plans its work that includes people from all functions within the organization. This structural change in the way the organization operates demonstrates an acknowledgement by leadership of the benefits of including more people in the planning and decision-making processes so integral to optimal company performance. With the challenges of being in a high-growth phase indefinitely, it is very easy to push aside an activity that does not generate immediate tangible results. This

study demonstrated that including diversity has the potential to be hugely beneficial but it is still challenging when many different viewpoints converge and sometimes teeter on the edge of chaos. Inherently messy, true dialogue entails difference, emotion, conflict and fantasy (Stacey, 1996, p. 13). Inclusive conversations can be difficult especially if the idea that everything must be controlled is a prevailing mindset. Having conversations flow in another direction and move beyond a hierarchical idea of control is unnerving to many. Wheatley puts this in perspective, "we have created trouble for ourselves by confusing control with order" (2006). When dialogue becomes a little messy, it may be challenging for leadership to refrain from exerting control to contain the conversation in its desired direction, but I sense participants are now more attuned to the value of different voices and the possibilities that are likely to emerge if given the chance.

RQ4) In What Ways Could the LSPS Model or Project Be Improved?

In answering this last research question, the project's positive aspects and benefits, its limiting aspects, and a discussion of the need to balance power dynamics will be presented. This will flow into a discussion of ideas on how to improve the execution of this project and recommendations on refining the LSPS model. The positive aspects of this project framed simply as 'what worked' are now examined.

What worked – liberating aspects. Participants identified several positive aspects of both the project itself and the LSPS model. Three main ideas were identified on aspects of the study that people specifically appreciated: 1) the inclusion of diverse participants, 2) activities structured for equal sharing and listening, and 3) exploring individual and collective purpose.

Including diverse participants. Many people made affirming comments about the level of full participation and the value that was placed on hearing all voices. There was an appreciation expressed for the "removal of the hats" that hierarchy imposes in their daily work and being in a space where people engaged on "equal footing". While the organization had convened other companywide events, which were seen as beneficial, these gatherings did not draw upon the talent of everyone and work to solve issues together. At a deeper level, the inclusion of diverse people who are not normally invited in such discovery and problem-solving activities, to lend their voice and talent to shaping their collective work together represented a sign of respect. Those who were not normally included felt appreciative and those who were normally included realized the multiple benefits of having diverse participants tackle difficult challenges together.

Activities structured for equal sharing and listening. A larger theme that was expressed in a variety of ways from all participants was the importance of listening. Each of the liberating structures used in this study incorporated elements of listening. As people engaged in the interactive group processes, they quickly realized the importance of every person and their contributions to the success of the organization. They were also able to comprehend the bigger picture of the organization and how it functions. They found the person-to-person, small group, and whole group interactions highly beneficial. Looking beyond the study, being ever self-organizing, participants described various ways to build listening into how the organization operates including implementing regularly scheduled events which include diverse participants from all parts of the organization dedicated to incorporating communication using methods that structure more listening into the design.

Specific liberating structures activities mentioned as especially helpful were 1-2-4-All, Conversation Café, Fishbowl User Experience, 25 Gets You 10, Appreciative *Interviews* and *Positive Gossip*. Each of these liberating structures builds in time for individuals to organize their own thoughts before sharing with others and arranges time to listen to what others are saying. Fishbowl User Experience and Conversation Café were mentioned by a few people as particularly useful because their design "forced" people to remain silent and listen. It was suggested that using liberating structures which helped people develop active listening skills in restating what the other person was saying to ensure understanding would have been helpful. Developing better communication skills was mentioned by multiple participants across the workshops and interviews as a goal for many participants. As a way to wrap up the series of workshops with the group, I adapted *Positive Gossip* and took time to address each participant expressing my gratitude and appreciation for the unique qualities they brought to the group. I knew it was an outsider's perspective, but I saw immense talent and wonderful qualities that perhaps not everyone sees when the 'hats are on' at work. I wanted to recognize the good work of everyone and encourage them to continue moving forward with their newfound understandings and skills. This was received very positively and closed the study on an optimistic note. Complexity science reinforces this idea. Chemistry Nobel Prize winner Ilya Prigogine stated that positive feedback tells a system to keep doing more of the same (Holman, 2015).

Exploring individual and organizational purpose. The second type of activities that participants described appreciation for were those that explored individual and organizational purpose. In the initial study design it was vital to include conversations

that explored purpose. Lipmanowicz and McCandless' tenth guiding principle is *never* start without a clear purpose which emphasizes the value of taking the time to have a conversation about the deepest need for their work (2013) linking their personal purpose to a larger organizational and even societal purpose.

The first of these conversations occurred in Workshop One and the second, extended conversation occurred in Workshop Three, each using adaptations of *Nine Why's*. The initial activity generated a nice starting point as people identified two main reasons why their work was important: 1) bringing order to the workplace enhances happiness and well-being and 2) developing human potential contributes to self-fulfillment. This was a new kind of conversation to have collectively, although the owners mentioned they have these kinds of conversations amongst themselves often. The second conversation around purpose was intended to help people recognize each other's unique talents and gifts they offer the company and explore how their contributions benefited the company.

During these Workshop Three conversations, perhaps because participants were now much more familiar and comfortable with these very participative, searching, creative group processes, the small groups were highly engaged in these conversations and we collectively decided to extend the time to explore the topic further. The owner group had time to communicate about the larger scope and longer-term vision of the company while they also had time to hear how non-owners were interested in exploring possible career paths which linked their purpose to the betterment of the organization. I mentioned to the group that these conversations should be ongoing as they evolve into the discovery of a collective purpose. In addition to learning what worked, I learned what

wasn't working throughout the workshops during reflection activities and from the postproject interviews. This information is now addressed.

What didn't work – limiting aspects. The feedback on how to improve this project and the LSPS model was thoughtful, specific and constructive. During Workshop Two we used Wise Crowds to tap into the wisdom of the group to help a "client" think differently about a problem. I was the client for this activity and the small groups addressed what was working with the group processes, what was not working and ways to improve the group processes for the next workshop. I told them, just as they had their action plans to implement, I would have my own action plan based on their feedback. This was one of my favorite activities in this study for two reasons. First, as a researcher I am truly curious and want to learn everything possible to improve these processes. Second, I was able to demonstrate a way to receive critical feedback with genuine appreciation and no fear of what they might say. I was trying to normalize the processes of reflection, dialogue and adaptive action as a regular part of collective endeavor. The small groups collaborated and offered very similar advice between the different groups, demonstrating alignment in their ideas. Every liberating structure is developmental in many respects and Wise Crowds gave participants the opportunity to practice delivering constructive and critical feedback. From all sources of data, two main ideas emerged on how to improve this project and three key ideas for model refinement are now discussed.

Participant self-censorship in larger group. When I conducted the individual interviews, several people from both the production worker and administrative functions mentioned their silence during some of the conversations explicitly because of the presence of some of the owners. While the group processes were structured for equal

time for sharing and listening, the power dynamics of hierarchical relationships could not be dissolved. Several participants mentioned their apprehension to contribute more openly for fear of some sort of negative consequence for speaking up. Drawing upon my experience as a change practitioner, these power dynamics are not unique to this organization. Understanding that hierarchical power dynamics are likely to be present in collaborative conversations, the question for the change practitioner must become, "how can I arrange interactions that are safe for all participants in which this information can emerge?". This question is addressed under model improvement.

Workshop intervals too long – Saturdays were difficult. There was distinct start-stop feel to this study that made it difficult to maintain momentum. The participants felt it and I felt it. Each of the workshops were conducted three months apart because the participant organization needed to schedule them in concert with their quarterly board meetings for convenience. In an ideal world, I would have scheduled the workshops spaced about four weeks apart, but this was not a practical possibility for the organization.

Another factor that inhibited continuity was the physical distance with me located in Seattle and the participant organization located in Austin. A few participants mentioned it would have been helpful for me to check in between the workshops. This was tricky because while I did have communication with the HR manager between workshops, I did not with other organizational members who had key roles in implementation. I had not contracted this aspect on the front end of the project. This feedback shows they were simply asking for more support during implementation. This disconnect in communication occurred because I had an agreement with leadership and

did not want to do something that could possibly be seen as circumventing formal agreedupon communication channels. In retrospect, I would have negotiated communication with greater latitude with key people because leadership was very receptive and accommodating throughout the entire study.

A third factor that contributed to the disjointed feel between workshops was that I was not a part of the organization. The eighth key premise of dialogic OD practice is that consultants are a part of the process, not apart from the process (Bushe & Marshak, 2015). Being an outsider to the organization whose only face-to-face interaction was during the actual workshops and the subsequent interviews had both positive and negative aspects. Several people mentioned it was useful to have an outsider who was "neutral" lead the processes. On the other hand, as regards following up, being part of the organization would have allowed me to better support the participants during the implementation phase.

Several participants offered similar suggestions of holding regularly-scheduled dialogic events.

Needed more clarity linking activities with "end game". The ultimate goal or the "end game" of this study as it was described was not clear to some participants. For several people there was confusion with connecting what we were doing as a group and how it would ultimately benefit them. As a researcher my primary goal was to help them practice and develop a dialogic practice that moved the organization towards a shared leadership approach to change. When they defined their change initiative, "Surf the Wave — Building organizational responsiveness and adaptability in a volatile business environment", the focus of each subsequent workshop was collectively figuring out how

to do that. Looking back, I needed to draw a clearer link between the larger research goals, their change initiative, and the workshop activities which were highly complementary as a shared leadership approach to change ultimately builds organizational adaptability.

What I learned from this feedback is to simplify the message clearly articulating the links between what we were doing and where we were going and repeat it often. In future work, I will begin each workshop with a very clear overarching goal of helping the group to develop an inclusive, participatory practice that will help them work together more effectively in pursuit of any endeavor. They choose what to work on. They choose how to implement it. The change practitioner guides the processes that help them get there. While I communicated this, I think it got lost in the clutter of everything else. Someone told me to tell them repeatedly throughout the study why they were there and then tell them again because it's not the focus of their everyday work. I needed to remember that I am coming from my research world where I think about these concepts extensively and why this work is important and it seems obvious, but they are immersed daily in an all-consuming, rapidly-expanding manufacturing environment just trying to manage the fast-paced and ever-increasing workload. Thinking about the study and how what they were practicing and learning would benefit them was the least of their concerns. This realization highlights the importance of summarization and making links between activities and larger goals. Repetition is necessary. Lesson learned.

Being Aware of Power Dynamics

Liberating structures, by design, structure approximately equal time for sharing and listening by all participants. These microstructures help to distribute power more

evenly by giving every participant voice and equal say in choice as decisions are made collaboratively. Furthermore, the LSPS model includes creating a container for emergent dialogic exchanges to occur that tends to both the physical and psychological aspects of the environment. When the physical space is flexible for an array of diverse activities with people moving around and the psychological 'space' is made safe with inclusive, participative processes designed to engender social sensitivity, it is easier to assist participants transition from a hierarchical practice of leadership towards a heterarchical, shared leadership practice. This is theoretically logical, however, the actual accomplishment of creating these conditions proves a little trickier.

Throughout each of the workshops, as much as was possible, I gave participants equal opportunities to engage, share, listen and learn, however, perhaps I placed too much emphasis on my ability to create a completely psychologically safe environment. When I asked participants in the post-project interviews if the group processes created an environment where they felt psychologically safe, the immediate answer from every participant was yes. I followed up with a second question, "was there anything about the group processes that caused you to feel unsafe, unheard or not valued?" and again got simple answers of "no, not at all". For some people, however, these questions opened the space to share reservations about fully disclosing information with some of the owners in the room. This feedback reminded me that creating a safe psychological space is not completely within my control. It reminded me that I have to be ever-cognizant of invisible yet ever-present power dynamics that influence the willingness of some people to fully contribute. Even with inclusive and evenly distributed participation, it is unavoidable that some lower level employees will be reluctant to express some things out

loud because they fear some kind of negative consequence. It is impossible to remove all power imbalances. This new approach to leading change together, however, has the potential to interrupt these power dynamics and open space to re-think and re-negotiate relationships and the way in which work is accomplished together. Because power is such an important dimension of group dynamics, this information nudges me to be more curious about how to more effectively balance power within hierarchical groups and holds implications for further model refinement. Keeping what worked, what didn't work and power dynamics in mind, how this particular project was executed can be improved and how the LSPS model can be refined are now addressed.

Project Improvement

Based on the data gathered, two primary tweaks to improving how this study was executed are identified: 1) more clearly linking workshop activities with the change initiative and the larger research goals, and 2) scheduling the workshops approximately four weeks apart.

Clearly link activities with the larger goals and repeat often. Keeping in mind the participants were pulled out of their very busy and all-consuming daily work activities without thinking much about the research project, it is critical to summarize the project and its goals and link it with the day's activities. Each workshop started with an overview of the day and, in Workshops Two and Three, a review of what happened at the prior workshop. This would be the opportune time to repeat why we are here and draw links between what we are doing and how it will help get us to where we want to go.

Making these connections repeatedly throughout the workshops will reinforce more holistic, picture thinking helping them see beyond the every-day job duties.

Schedule workshops closer together. Momentum generated during the workshops dissipated in the three months between the workshops. The execution of this project could be improved by scheduling the workshops to be approximately four weeks apart giving participants enough time to implement the action plan, but not so long that momentum is lost. Project execution could further be enhanced by contracting with leadership on the front end the ability to communicate with key people throughout the implementation phase.

LSPS Model Refinement

Based upon the entirety of data collected, three key elements were identified to improve the LSPS model which would enhance power-balancing, developmental aspects, and sustainability of changes. The model improvements include: 1) expanded power-balancing activities, 2) requisite communication skills-building activities, and 3) regularly-scheduled dialogic events.

Expanded power-balancing activities. The design of liberating structures facilitates a greater balance of power among participants by ensuring equal time in sharing and listening as issues are defined collectively and next steps are shaped together. Throughout the workshops for every activity, participants were intentionally invited to seek engagement with people with whom they were least familiar to build more meaningful personal connections as well as gain a greater understanding of people from other functions within the organization. While these processes were very effective in doing just that, there appears to be room to provide opportunities to create an even safer space for particular groups to speak openly without fear of negative consequences.

The core principals of seeking truth and pursuing justice in particular, help to inform the idea of designing activities to more effectively balance the asymmetrical power dynamics present. The LSPS model's practice of creating a container that nurtures a safe psychological environment will now include activities to structure time and space for groups of people with similar job functions or characteristics to be together. These configurations will enable people to engage in open dialogue in which "undiscussable" issues can be more easily discussed. The ways in which this could be done are limited only by the change practitioner's imagination. Two initial ideas are offered for consideration using liberating structures in which this could be accomplished either directly or indirectly:

• Custom design an activity that directly addresses the challenge borrowing from various liberating structures. This option gets at the heart of conflict resolution and addresses the issue directly. Craft an invitation that speaks to the "silence" or the particular issue that people are unwilling to speak about in the larger group. An example of such an invitation taken from the LS Mad Tea is, "What is a courageous conversation we are not having?. Alternatively, you could come up with your own question tailored to the challenge at hand such as, "If you could wave your magic wand and make one thing happen to create a more psychologically safe working environment, what would that be?". Participation could be distributed as in the LS What I Need From You by functional cluster. The activity could start with individual reflection and writing thoughts down on index cards. Turn-taking in sharing could be borrowed from Conversation Café in which members can initially speak only when they are holding the talking stick. If

the conversation is potentially volatile, the change practitioner may choose to bring in additional facilitators to assist each group in framing their issues to later share with the larger group. The main idea is to help people get practice in engaging in safe conversations essential to the proper functioning of the organization.

Conduct an activity that indirectly addresses the challenge. This option is an indirect method of addressing the conflict created by a power imbalance. What I *Need From You* is a liberating structure designed to surface essential needs across functions and accept or reject requests for help (Lipmanowicz & McCandless, 2013). This activity opens dialogue between groups and illuminates essential needs of each group; unlikely conversations in hierarchical organizations. While this activity does not directly address the "silence", it does provide a safer space and time for people working within the same job functions or other similar attributes to discuss what it is they need to do their jobs effectively. Each group chooses a spokesperson to make a request to other groups and responses are invited. Through this activity, misunderstandings can be mended and prejudices can be resolved by demystifying what members need to accomplish mutual goals. This activity promotes clarity, understanding, transparency and integrity while building cohesion across silos (Lipmanowicz & McCandless, 2017). As misconceptions are dissolved and communication lines are opened, underlying tensions are eased as all groups' voices are heard, valued and acted upon.

Whether a direct or indirect approach to addressing conflict is used is, of course dependent upon the specific situation and context of the organization and its people. The

LSPS model's practice of creating a container that is psychologically safe will now include an activity for making space for similar-groups to engage in open dialogue.

Design requisite communication skills-building activities into every workshop. Overwhelmingly, participants reported improvement in communication as a result of the workshops. At the beginning of the study, one of the initial possible change initiatives the group considered was improving communication. Over the course of the workshops, several conversations touched upon the need to improve both individual communication skills and the flow of communication throughout the organization. Post-project interviews reinforced the theme of participants seeking more opportunities to practice using communication skills more effectively, with a special emphasis on improving listening skills.

There seems to be an assumption in group work that people inherently know how to engage in dialogue, share information, name issues, listen, ask for help and receive help. This is a false assumption. The feedback led me to the idea that including specific activities that help participants build communication capabilities needs to be a part of group experience when coming together. The LSPS model will be further refined by incorporating activities that build interpersonal communication skills into every experience as a part of the model's practice of developing individual capabilities. There are a variety of liberating structures which can accomplish this objective while also being instrumental in accomplishing other work by tailoring the invitation for participants to consider. The purpose of *Heard, Seen, Respected* is to practice deeper listening and empathy with colleagues while *Helping Heuristics* lets people practice progressive methods for helping others, receiving help and asking for help (Lipmanowicz &

McCandless, 2017). Many liberating structures could be adapted to help participants develop more effective interpersonal communication skills.

Hold regularly-scheduled dialogic events. Desiring transformational change necessarily implies the organizational system that designs how work is accomplished must also change. The responsibility to change cannot be assigned to individuals only. Macrostructures must be put in place to systematize desired changes. If, as dialogic OD theory suggests, an organization is the conversations it has, then intentionally and thoughtfully designing regular dialogic events is a vital aspect of organizational life and a leader's fundamental responsibility. To hold a dialogic event and assume that the responsibility rests only with individuals would be negligent. This rationale and feedback from participants lead me to revise the LSPS model to institute holding regularly-scheduled dialogic events to occur at least quarterly to ensure open communication and continuity of change efforts.

The data also revealed an unexpected theme unrelated to research questions.

Unexpected Theme Unrelated to Research Questions

Several people from all functions (owner, administrator, production) in the organization made comments that indicated the existence of what I describe as an ingroup/outgroup culture. The two divides were family/non-family and male/female. The family/non-family divide was mentioned by both family (owner) and non-family participants. Family members communicated to groups in the workshop and in conversations with me how they meet to direct company strategy, which is not surprising as they are the leadership of the company. What I learned as a result of the interviews is that this division is felt by some as if they are not a part of the "elite". It is important to

mention that no one was negative in their comments, however they were mentioning these issues as a part of the culture they experience within their daily work. The second divide that came up in interviews was the male/female divide. One person offered an explanation that the industry is predominantly male and sexism is pervasive. This is a larger societal issue, but nonetheless, has powerful influence on relationships and what is possible within this organization. While these sensitive topics emerged even though they were unrelated to the research questions, these are issues that could be addressed through a continued dialogic practice as the group forges ahead building closer, more trusting relationships, remembering that every person cares about each other and as well as the success of the organization.

Study Limitations

Lack of Macrostructural Support

The first limitation of this study, designed to spark transformational change, is the absence of macrostructural support to sustain change. Specifically, this study attempted to assist a hierarchically structured organization shift towards a shared leadership approach without changing organizational macrostructures (i.e., physical facilities, formal authority, organizational departments, policies, formal communication channels, etc.). One of the concerns with action research among social scientists is the sustainability of change using an approach that focuses on processes and not structures (Druckman, 2005, p. 316). Is it reasonable, after all, to expect change to stick without putting into place modified macrostructures that support the changes? Assuredly, changes at the group process level would have a greater chance of enduring if they went hand-in-hand with macrostructural support. The reality, however, that most leaders face is the need to

include and engage others in a power-with approach while operating within an inherited, rigid system that is resistant to change and relies upon structural exclusion and power-over others to operate. This is the problem this study addresses. While changing group processes *and* macrostructures of organizations to support sustainable change is a more ideal scenario, it is not grounded in the reality that most leaders face, nor is it a feasible proposal to leadership as an outside researcher coming into an organization. This leaves the change practitioner or researcher the more viable option to start at the grassroots of the organization with an intervention designed to spark some kind of change in the participants who will then, ultimately transform the system.

This study sought to manipulate the microstructures of group interaction and communication patterns to allow participants to experience first-hand, meaningful human-to-human interaction where hierarchy, albeit temporarily, is suspended or greatly reduced as all are included and engaged in the activity of leading change together. What is unknown is how this experience will impact the future direction and design of the organizational macrostructures beyond the study.

Research Sample not Representative of Organization Population

A second limitation of this study was the ratio of owners, administrators and production workers who participated in this study. Seven of the eight owners were represented (88%), six of 15 administrators were represented (40%) and six production workers out of 32 were represented (19%). Space was opened to hear from all levels and functions with emphasis placed on hearing from production workers; however, a more balanced representation of this category of employees could have better-informed this research.

Single Organization

A third limitation to this study is that it is confined to a single organization and the findings may be relevant for this particular group and context but may not translate to generalizable findings. Even so, this work will contribute to the fields of change management and conflict analysis and resolution by adding empirical research experimenting with practical ways to include and engage people in democratic forms of dialogic interaction within a hierarchical organization structure

Implications. Did Transformational Change Occur?

Through this study I learned that events such as the workshops dedicated to a dialogic OD approach to change generate positive outcomes including closer interpersonal connections, improved communication, operational improvements and a renewed sense of possibility. Did these results have a transformational effect on the organization? Bushe and Marshak argue that by simply structuring a space where people can engage in effective dialogue where people are able to openly express their thoughts with a willingness to listen to each other carefully is, by itself, insufficient for transformational change to occur (2015). Bushe & Marshak define transformational change as something that emerges as individuals self-organize to co-develop and sustain generative images of their future which disrupts the status quo through narrative/discursive meaning making (2014a). They suggest that at least one of three core processes must occur during the OD practitioner's work for transformational change to occur. This study was interested in learning if a dialogic OD practice using liberating structures within a problem-solving structure could initiate some kind of transformational change within a hierarchical organization.

The first change process is a disruption in the ongoing social construction of reality is stimulated or engaged in a way that leads to a more complex reorganization (p. 20). A disruption occurs when the organizational social order; the pattern of social relations in how decisions are made, how people communicate, how people are included or excluded for example, is no longer acceptable or rational to its members and it is unlikely that things will go back to the way they were (p. 21). The study workshops decidedly disrupted organizational communication and interaction patterns, but did they disrupt them so much so that they will not go back to the way they normally operate? Much of the organizational social order will remain as it was while some of the social order has begun to change as a result of this study. The newly formed interdepartmental monthly meetings are a new macrostructure put in place designed to include more people in guiding the direction of the company in the day-to-day business and also longer-term strategy. As I am coming to understand transformational change, it is more of an evolutionary process in which the work is never done. It is not an either-or question if transformation happened or not. This new more inclusive monthly meeting is a start. The group mentioned that this was a realistic action plan that would be given the space to evolve as needed.

The tool reorganization is another case of a change that will likely not go back to the way it was. To sustain this tool reorganization requires people's understanding and behavior to change along with it and, reportedly, this is happening. Relationships were also strengthened and minds were opened to new possibilities because of the project. The impact of these factors is unknown at this point in time, however momentum continues in the direction of positive transformation.

The second change process Bushe and Marshak mention is *a change to one or more core narratives takes place* (2015). This is a storyline that develops and evolves as people engage in meaning-making conversations. One of the clear narratives that emerged from the data was understanding the value and necessity of every person to the proper functioning of the organization. This storyline evolved to include the need to establish a recurring event dedicated to companywide communication because many positive outcomes were generated. Action was taken as a result of this narrative in the establishment of the monthly interdepartmental meetings. As the organization moves forward with this structural change, the narrative will likely further evolve because of these sharing, listening and learning events.

The third change process associated with transformational change is a generative image surfaces that provides new and compelling alternatives for thinking and acting (2015). Participants created a generative image in Workshop One: Surf the Wave to capture the change initiative of being responsive and adaptive in a volatile business environment. Generative images are combinations of images and words that offer a new way of thinking about organizational reality (Bushe & Marshak, 2015) and are key to appreciative inquiry efforts (Bushe & Kassam, 2005). One owner mentioned how the owners group alone would have never created such a compelling generative image and change initiative. Surf the Wave came from a production worker.

The work around this generative image was touched upon in subsequent activities throughout the workshops. During Workshop Three, I asked participants to reconsider whether the initiative still made sense in light of all they had been learning. The response

was a resounding yes, the initiative was extremely relevant. A photo of the generative image is included on the following page.

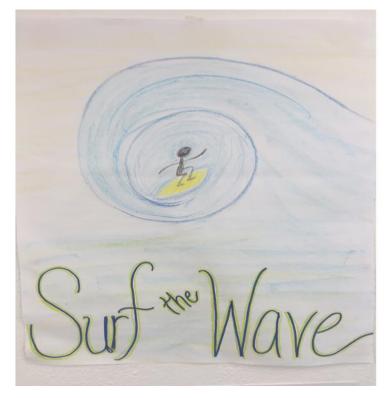


Figure 13 Generative Image Flip Chart

The question then becomes, did the creation of a generative image initiate transformational change in the organization? There is no doubt that the *Surf the Wave* generative image allowed people to envision the change initiative in a more creative way and resonated much better than anything that could have been imposed upon the group. There was a greater sense of ownership around the initiative because it came from them in their own words. From where I stand now, I believe the *Surf the Wave* generative image can be as transformational as the organization will allow. A poster on a wall, even when produced from the workers themselves, alone will not have the power to initiate transformational change if things stay the same. The generative image will only be as useful as it is kept alive by efforts from all parts of the organization to support it.

Transformational change occurred to some degree in each of these three core processes including a disruptive process that led to a more complex reorganization, new narratives and conversations occurring at both the individual and organizational levels, and the creation of the *Surf the Wave* generative image and its attendant change initiative. Liberating structures by design set the stage for an inclusive event that invites diverse participants to engage equally in a developmental dialogic practice that addresses issues decided upon by the participants who together co-create their desired future. At the same time these processes are occurring, interpersonal connections and trust are built along the way. When the process becomes a little messy, the group self-organizes.

Conclusion

This participatory action research/cooperative inquiry case study focused on the topic of leading organizational change collaboratively in the entangled space between formal hierarchical structures and informal complexly adaptive emergent forces in organizations. The purpose of this study was to understand how a newly developed Liberating Structures Problem Solving model (LSPS) of facilitation helped participants navigate this space through a collaborative dialogic OD approach to change within a hierarchical structure. The guiding research question was, "in what ways does the LSPS model as a dialogic OD approach foster enabling conditions for the emergence of learning, adaptability and change within a hierarchically-structured organization?" The problem this research addressed is a dilemma faced by countless leaders who must work within pre-existing systems structured for exclusion and power-over others, yet must increasingly find ways to include and engage others in a power-with approach to competently meet today's complex challenges.

Drawing upon social constructionism, complex adaptive systems theory, dialogic OD and liberating structures within a problem-solving structure, a new facilitation model was developed to address the research problem. The LSPS model is a dialogic OD approach to group interactions using liberating structures where equality of participation and even distribution of power stimulate multi-party reflective conversations promoting mutual accountability for collective learning and results (Mehra, Smith, Dixon, & Robertson, 2006, Raelin, 2012, Redmon, 2014). A participatory action research/cooperative inquiry methodology was applied because of its radically participative quality that encourages a collaborative relationship between the researcher and the researched who together design, manage and draw conclusions from inquiry in iterative cycles of action and reflection (Reason, 1999). This spiraling process of collective action, reflection and dialogue throughout the project, built into the workshop design with liberating structures, made it possible for participants to co-produce the next steps. The three workshops were spaced three months apart and intentionally avoided one-to-all teaching, and instead designed an experience for all-to-all learning where participants could share, listen and learn from each other through the problem-solving steps.

What Was Discovered and Learned?

I have learned a few things from this study discussed below.

A problem-solving structure is useful only if it is adaptable to attend to the needs of the group. It is helpful to have a general framework such as the nine steps to guide the process, however this must be matched with a flexible approach that agilely accommodates the needs of the group. A problem-solving structure is useful to move a

group from problem identification to action by addressing essential aspects of a sustainable action plan, however, adhering to sequential order or including every step is unnecessary and could prove problematic. If I would have strictly adhered to each step in ascending order, I would have missed opportunities that emerged within the natural flow of dialogue. Being true to the study's theoretical and methodological foundations requires valuing each person's voice and the will of the group and being responsive to those needs. Pushing through the steps sequentially holds the risk of alienating the group by imposing an outside agenda on them as it sometimes necessitates dismissing emergent issues. Groups in general want to move to action so the steps are instrumental, however, sometimes there is a greater need to have meaningful conversations that are foundational to unified action.

Small-scale simpler actions with frequent action-reflection-dialogue iterations built into the process build organizational adaptive capacity. I learned the value of Lipmanowicz and McCandless's guiding principle *learn by failing forward* which encourages groups to take small risks quickly while minimizing the time between iterations (2013). This idea discourages elaborate plans that have a lower probability of implementation and instead, invites simpler, more manageable action that is re-examined in frequent iterations of the action-reflection-dialogue cycle in which failure is celebrated as a source of progress and the necessary adjustments are identified and implemented.

Just do something. This project demonstrated the power of inclusive collaboration and action. The act itself of gathering people together from all parts of the organization because their presence and contributions are valued sends the message "we need you and we appreciate you". Practicing group processes that encourage individual

expression and allow the group wisdom to emerge, leads to action that is more likely to be implemented. At Workshop One, the participants identified a list of possible change initiatives shown below.

Flip Chart Possible Initiatives Make World Class Committee more effective • • Build a greater sense of ownership & commitment, greater sense of personal pride • • • • • • Improve Communication, more effective, honest communication • • • • • • Strengthen Relationships • • • • Establish & Improve Procedures • • • • • Surf the Wave — Being Responsive & Adaptive in a Volatile Business Environment • • • • • • • Understand the Business Better • • • • • •

Figure 14 Workshop One Possible Change Initiatives Flip Chart

The dots indicate the votes each initiative received. The participants chose and intentionally addressed the *Surf the Wave* change initiative throughout the project. Although this action targeted one specific initiative, each of the other possible initiatives were also addressed and improved, albeit inadvertently. This indicates that which particular initiative is chosen is less important than the act of getting everyone together to co-create their future. This point cannot be overstated. Groups can get sidetracked as some people stubbornly cling to defending what they think is most essential to address, but this experience suggests trusting the group and committing to work together is the key to making progress on multiple initiatives. If more democratic dialogic processes are used with more frequent cycles of action-reflection-dialogue, the organization develops adaptive capacity while progress on multiple fronts is realized.

The LSPS model is an effective approach in addressing the research problem in the participant organization. This brings me to my final point that addresses the study's problem of working within hierarchy and its exclusive power-over practices while needing to include and engage many people in a power-with approach to meet

unprecedented challenges. As hierarchical structures persist and conventional leadership practices continue to be applied for any number of reasons, how do you work within this existing environment and lead change together capably? This study sought to directly address this challenge faced by the participant organization, however, it is a challenge confronting innumerable organizations. In this study, the LSPS model offered a viable approach to working within the entangled space of formal hierarchical structures and informal complexly adaptive emergent forces in which people were able to experience a dialogic practice that honored and drew upon their uniqueness that contributed to a higher collective intelligence which was then moved into the realm of action. Said another way, this approach to change worked for this organization because it brought to light and acknowledged organizational realities, honored the nobility and contribution of each person, and assisted groups moving forward together in unified action. It did not seek to impose a view that hierarchy is inefficient and often counterproductive to organizational goals, but instead allowed participants to experience a new way of being together and enabled the group to come to their own evolving understandings and conclusions. There is no doubt in my mind that if this organization continues to hold more inclusive dialogic events, they will accelerate their progress and continue to evolve in their group processes towards a more democratic approach to change.

Contribution

While this research was limited to a single case study, it is important in its contributions to the fields of conflict resolution, change management and leadership. This study may be particularly useful to change practitioners who are seeking practical ways to help organizations shift from inherited mindsets and practices that may be holding

them back, towards more democratic practices that draw upon the latent intelligence, talent and leadership within it members. This model lessened sources of structural conflict inherent in conventional group structures (e.g., hierarchy, authority, power-over decision making, structural asymmetrical participation) while at the same time, contributed to direct and relevant action as study participants lead change together. The integration of liberating structures within a framework that addresses both the human dimension and the need to get important work done demonstrates the power of unleashing the latent potentialities and leadership within people and the organization through minimal shifts in microstructures. This study demonstrates the natural ability of people to be creative and self-organize when invited to the conversation in which change is shaped together. This study provides the inspiration and logic behind the development of the LSPS model and offers a step-by-step account of its implementation in a real organization setting shedding light on its accessibility and simplicity. Furthermore, because it is rooted in practice, it is developmental at both the individual and organizational levels as people try out new patterns of communication and interactions. This study highlighted how, when new connections and conversations are sparked, the emergence of new possibilities becomes apparent. While the findings cannot be generalized, this case study is important in demonstrating that many significant positive outcomes became possible within an existing hierarchical structure by making tiny shifts in microstructures that helped participants practice and move towards a shared leadership approach to leading change together.

Recommendations

The data generated by the participants and my own observations on how to improve this research project are the basis of the following recommendations.

Build more clarity around purpose and "end game". The context from which participants operated included being in the midst of intensive growth. Undoubtedly, people are busy with their regular work and this study was not a burning concern for most. I needed to remember to be very clear about where this study was going and the benefits they would receive and I needed to repeat it more often than I did.

Schedule events four-to-six weeks apart with structured intermittent communication in between. Every workshop generated positive momentum that needed more structured support from both myself and leadership. Considering the apprehension I had in contacting participants outside of the formal agreement with organizational leadership I would have negotiated my ability in the contracting phase of this study to have the latitude to reach out and support people during the actual implementation. I would also have asked at least one person in leadership to accompany me to both enhance the credibility of the effort and to develop leadership's experience in new ways to encourage and support people during implementation. This communication would include listening to how participants thought the implementation was going, asking them specifically what barriers they were facing in implementing the action plan and finally asking them what they need to move forward. While the study generated positive outcomes, the question of how much more could have been realized with more frequent events lingers.

Define monitoring and evaluation mechanisms post-project and contract up front with leadership. When designing this study, the focus was on executing the LSPS model appropriately and competently throughout the duration of the project while attending to the needs and constraints of the organization. When the study ended, several people suggested I come back and follow up, which is my recommendation for designing a similar study. It would be fairly simple to contract up front with leadership to include a follow up monitoring and evaluation activity either six months or a year down the road that could likely reinforce the sustainability of the changes. This monitoring and evaluation protocol could focus on learning what changed, how the organization benefited, what could be institutionalized and how to do that.

Ensuring sustainability of practice. While the LSPS model is developmental and liberating structures are inherently capacity-building at the individual, group and organization levels, unless the changes are institutionalized in some way, their imprint will likely fade away and the organization may return to its old ways. It would be helpful to have a few options to offer the participant organization with the transition from the highly-supported workshops to doing it on their own. A few options could be considered:

a) the final workshop could be conducted by volunteer study participants who work with the principal investigator to design and conduct the final workshop, b) after the completion of the study, the organization could identify and select people to participate in LSPS immersion workshops in which they are able to do a 'deep dive' into experiencing and learning how to keep these practices alive and thriving within the organization, c) the organization could set up quarterly gatherings in which volunteers could offer to work with leadership in designing and conducting regular dialogic events that use the model to

address organizational change initiatives, or d) the final workshop could include activities centering around the question, "how can we make sure these changes stick?" using various liberating structures.

Include more activities designed to specifically develop better interpersonal communication skills. Looking back at what liberating structure activities were included in the workshops, including *Heard*, *Seen*, *Respected*, *Troika Consulting* and *What I Need From You*, which encourage the development of communication skills and helping relationships would have been helpful. Time was always a constraining factor and the value that is placed on such activities is often minimized from a mindset focused on efficiency. In retrospect, I would have better developed my introduction to these types of activities to draw attention to the importance of the development of these interpersonal communication skills. This information will further inform the refinement of the LSPS model to include at least one activity that enhances interpersonal communication skills.

Future research. As the study was drawing to a close, I had the impression that positive momentum was being generated as people could see real progress on initiatives and structural changes in the way they met, gathered information, made decisions and moved to action. Several people mentioned a desire to keep going or schedule follow up meetings to check in. It would be interesting and beneficial to the fields of change management, conflict resolution and leadership to continue tracking an organization over an extended period of time, perhaps two years or more to track the developmental capacity of the organization to establish their own dialogic events with the accompaniment of a researcher or change practitioner. As the trust was built not just among the participants, but also with me, if I were to have one more workshop, I would

have had production workers take the lead in designing the final workshop (with researcher support) which might better represent the actual efficacy of the project because ultimately what matters is what happens when the study is over and the researcher exits.

This research must be about finding innovative and creative ways to empower organizations to develop dialogic capacity to sustain transformational change into an unknowable future.

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Appendix A: Liberating Structures Menu

Liberating Structures Menu: Including and Unleashing Everyone ** 2.2*



Impromptu!

Networking!!

Rapidly*share*challenges*and* expectations, building new* connections!



9!Whvs!!

Make*the*purpose*of*your*



Specify*only*the*absolute* "Must*do's"*& **Must*not*do's"* for achieving a purpose!



Discovery!&!Action! Dialogue!

Discover, *park *& *unleash *local * solutions to thronic problems!



Integrated~Autonomy!

Move from tither Nor to tobust* bothMand%olutions!



What?!!

work together tlear!

What,!So!What,!Now!

progress to Ndate and decide*

what adjustments are needed!

Together, fook back on*



Wise!Crowds!!

Min!Specs!!

Tap*he*wisdom*of*he*whole* group*n*apid*cycles!

Wicked!Questions!!!

Articulate*the*paradoxical*

confront*o*ucceed!

challenges that a group must*



Generative!

Relationships!

Reveal*relationship*patterns* that*create*surprising*value*or* dysfunctions*



TRIZ!

Stop *counterproductive* activities % behaviors to* make*pace*or*nnovation!



Drawing!Together!

Reveal*insights*&*paths* forward*hrough*honNerbal* expression!



Critical!Uncertainties!!

*Develop*strategies*for*operating* in arange of plausible vet unpredictable futures*



Appreciative! Interviews!

Discover & build on the toot* causes of success*



Improv!Prototyping!!

Develop*effective*solutions*to* chronic*challenges*while*having* serious*un!



PurposeJToJPractice!!

Define the five telements that are*essential*for*a*resilient*&* enduring*nitiative!



1J2J4JAII!!

Engage*everyone* simultaneously in generating questions/ideas/suggestions*



AgreementJCertainty!

Matrix!

Sort*challenges*nto*simple,* complicated, tomplex and chaotic*domains!



Ecocycle!Planning!

An alyze the full portfolio of* activities % *relationships *to * identify*obstacles*and* opportunities*for*progress!



!User!Experience! Fishbowl!

Share know how gained from * experience*with*a*larger* community!



Shift!&!Share!!

Spread good tdeas and make * informal connections with



Panarchy!!

Understand*how*embedded* systems*interact,*evolve,*spread* innovation, and transform!



15%!Solutions!!

Discover & focus on what* each person has the freedom* and tesources to to now



Heard,!Seen,! Respected!

Practice*deeper*listening*and* empathy*with*colleagues*!



What!!!Need!From!You!

Surface*essential*needs*across* functions and accept or reject* requests for support



25JToJ10!Crowd!

25/10 Sourcing!!

Rapidly*generate*&*ift*a* group's most powerful* actionable*deas!



Social!Network! Webbing!!

Map*nformal*connections*&* decide*how*to*trengthen*he* networktoachieveapurpose!



Celebrity!Interview!

Reconnect*the*experience*of* leaders*and*experts*with*people* closest to the thallenges at hand*



7 Troika!Consulting!!

Get*practical*and*imaginative help*from*colleagues* immediately!



Design Story Boards!!

Define stepNbyNstep elements* for*bringing*projects*to* productive*endpoints!



Helping!Heuristics!

Practice*progressive*methods* for helping others, heceiving* help,*and*asking*for*help!



Open!Space!

Liberate*nherent*action*and*

leadership*n*arge*groups!



Simple Ethnography! Observe % * record * actual * behavior*of*users*n*the*field!



Keith McCandless % Henri Lipmanowicz ***www.liberatingstructures.com **

Appendix B: Interview Protocol



"Leading Change Together" Action Research Case Study Semi-Structured Interview Protocol

FUNCTIONAL JOB CATEGORY								
(Machinists/Tool Makers	O. Administration	O. Owner					
		LEARNING						
1.!	1.! As you reflect on your experiences over the duration of this study, what did you learn? What contributed to this learning?							
	CHANGE							
2.!	2.! Can you describe any changes you see in yourself as a result of being a participant in this project?							
3.!	3.! Can you describe any changes you see in your group as a result of participating in this project?							
4.!	4.! Were any of your relationships with other participants influenced or changed? If so, how?							
	What contributed to these changes?							
IMPACT								
5.!	As you reflect on your experiences as you progressed through the study workshops, what is the overall impact of this process? What stands out to you?							
6.!	As you reflect on your experiences over the last six months throughout this study, in what ways, if any, did these processes either reduce or increase conflict within the group?							
7.!	7.! How would you describe the impact of the group processes to lead to direct and meaningful action?							
	What contributed to this impact?							
PROJECT IMPROVEMENT								
8.!	What were the strengths of the LSP	S model?						
9.!	What were the weaknesses of the L	SPS model?						
10.!	0.! One of the goals of this study was to create an inclusive and safe psychological environment so everyone was able to contribute in meaningful ways. Did you feel safe to express yourself openly and honestly? Did you feel like your input was valued? If so, what factors contributed to that?							
11.!	Did anything cause you to feel unsa	fe, uninvited or not valued? If so, what c	contributed to that?					
12.!	12.! How could this project be improved? If we were to do this all over again, what would you have liked to see go differently?							
13.!	13.! Is there anything else you would like me to know?							

Appendix C: Recruitment Letter



Search for an Organization to Participate in Research Exploring "Leading Change Together" Using Liberating Structures Group Facilitation Methods

Dear Dennis & Cohorts.

I am looking for an organization to participate in a research project to complete a Ph.D. in Conflict Analysis & Resolution with a concentration in organizations.

This is an action research case study, so participant involvement in shaping the project is integral to the process. Also central to the inquiry is understanding the participant experience and perspective. The project has two research goals:

- 1) To learn participants' perceptions of what leadership is while advancing their understanding of leadership as a shared responsibility and group process.
- 2) To understand participants' experiences with and perspectives of Liberating Structures (LS) group facilitation methods as a practice of shared leadership.

Participants will collectively discuss and decide upon a change initiative they would like to address. The challenge could be anything; an operational issue or how the group works together. A problem-solving process will then be facilitated incorporating LS that results in actionable items participants may choose to implement. Two conversations will occur: 1) the content of WHAT they are talking about and 2) the processes of HOW they are working together. This research is driven by a deep curiosity to learn how participants re-imagine leadership as a collaborative process and to test LS methods as an integral part of shared leadership that will unleash true collaboration and generate collective wisdom to more effectively meet present-day challenges.

Because this project is the central research of my dissertation, it must meet certain conditions:

- 15 people or larger
- 12 hours of workshops + 2 hours of assessment

What do you get out of it?

GOALS OF RESEARCH FOR PARTICIPANT ORGANIZATION:

- 1. Accomplish important and pressing work
 - Have needed conversations
 - Make important decisions
 - Take relevant, immediate & realistic action where you may be stuck
- 2. Explore leadership and the challenges of leading change
 - Collectively identify challenges in implementing change
 - Have conversations exploring the concept of shared leadership
 - Co-develop possible solutions to overcome challenges of leading change
- 3. <u>Build better relationships</u> with each other
 - Increase mutual trust & respect

- Develop a greater appreciation for the work of others
- Foster feelings of connectedness
- Increase awareness of your interdependency
- 4. <u>Develop new skills</u> in working with each other simply by going through the LS group processes (listening, reflecting, asking for help, giving help, collaborating, problem-solving)
- 5. <u>Become more adaptive</u> as individuals and as an organization to more effectively respond to whatever challenges reality places in front of you

What do I get out of it?

GOALS OF RESEARCH FOR PRINCIPLE INVESTIGATOR:

- <u>Fulfill the requirements of my dissertation</u> research project with the highest standards of integrity
- <u>Demonstrate the efficacy of Liberating Structures</u> as participatory, inclusive, highly effective problem-solving and relationship-building group processes
- Help your organization advance your work, further develop your group processes and strengthen your relationships

What is Required of the Organization?

<u>PARTICIPANTS:</u> A group of 15+ participants, preferably from various levels and/or departments within the organization.

TIME:

Three meetings, four (4) hours each, totaling 12 hours, + assessment (2 hours). Approximately 14 hours total time commitment.

<u>Meeting/Workshop #1:</u> The project will begin with an introductory gathering to explain the process, answer questions, pose questions and receive feedback on the research design, which will be codeveloped around the issues identified. Informed consent forms will be signed and a pre-project assessment conducted. The subsequent meeting dates will be decided upon. Liberating Structures will be used to do much of this work. (4 hours).

<u>Workshops #2:</u> The researcher guides the group through a problem-solving process addressing the identified challenge. Participants will develop possible solutions and decide on immediate action to take. This workshop will also include group dialogue about how they are working together and include a feedback session in which the researcher answers questions, asks questions and gathers data about the group processes.

<u>Workshop/Meeting #3:</u> This workshop continues where the last left off and concludes with conversations to share new knowledge and plans moving forward as an organization. Post-project assessment conducted and interviews scheduled.

LOCATION: Preferably on site.

This is a sketch of the proposed research project. What I am looking for is an organization to commit to some form of this process that meets both the organizational needs and the researcher needs. The research design is adaptable. If your organization is interested in learning more about this research project, please contact the Principle Investigator: Many thanks for your consideration!

Barb Allen, Principle Investigator 479-747-5628 facilitate.peace@gmail.com

Appendix D: Site Approval Letter



1513 Brandi Lane Round Rock, Texas 78681 (512) 341-9368

SITE APPROVAL LETTER

Nova Southeastern University 3301 College Avenue Fort Lauderdale, FL 33314-7796

Subject: Site Approval Letter

To whom it may concern:

This letter acknowledges that I have received and reviewed a request by Barb Allen to conduct a research project entitled "Leading Change Together: An Action Research Case Study Merging Liberating Structures with a Problem-Solving Model" at Habros Precision, LLC. I approve of this research to be conducted at our facility.

When the researcher receives approval for her research project from the Nova Southeaster University's Institutional Review Board/NSU IRB, I agree to provide access for the approved research project. If we have any concerns or need additional information, we will contact the Nova Southeastern University's IRB at (954) 262-5369 or irb@nova.edu.

Sincerely,

Leila Belijat, HR Manager & Owner

leila@hagbros.com

Hagbros Precision, LLC 1513 Brandi Lane Round Rock, Texas 78681 (512) 341-9368

Appendix E: Informed Consent



Consent Form for Participation in the Research Study Entitled

Leading Change Together:

An Action Research Case Study Merging Liberating Structures Facilitation Methods

with a Problem-Solving Model

Funding Source: None

IRB Protocol #: 2016-72

Principal Investigator: Barb Allen, MBA 20222 Crawford Road Lynnwood, WA 98036 479-747-5628

For questions/concerns about your research rights, contact: Human Research Oversight Board (Institutional Review Board or IRB) Nova Southeastern University (954-262-5369/Toll Free: 866-499-0790) IRB@nsu.nova.edu

Site Information Hagbros Precision LLC 1513 Brandi Lane Round Rock, TX 78681 (512) 341-9368

What is the study about?

The purpose of this study is to investigate a new model of facilitation in a contemporary organization. More specifically, it is designed to help participants practice inclusive and empowering group processes to lead change together more effectively. Time will be structured throughout the workshops to include conversations where participants can reflect upon and talk about how they are working together. This study is particularly interested in learning how participants experience these group processes in order to shape subsequent development of the model to better meet organizational needs. The investigative study will be organized in three different workshops, four hours each, spaced approximately three months apart. Participants will choose their own change initiatives to work on during this time.

Why are you asking me?

You are asked to participate because you are a member of an organization interested in continuous improvement in all aspects of its operations and willing to allow this study with some of its members.

What will I be doing if I agree to be in the study?

If you agree to be in the study, you will be asked to participate in three, 4-hour workshops where you and your cohorts address your group's chosen change initiatives. The workshops will be facilitated

with a new model of facilitation using methods called liberating structures as you move through a 9-step problem-solving process. You are asked to attend all three workshops to experience the entire process as it evolves over time. The workshops are scheduled for Saturday, April 2nd, Saturday, July 16th, and Saturday, October 1st, 2016. At the end of the study, you will be asked to participate in a one-on-one interview with the Principal Investigator asking you about your experiences throughout the course of the workshops, which should take about 30-45 minutes to conduct.

Is there any audio or video recording?

This research project will include video recordings of all the workshops conducted on the topic of "Leading Change Together". These recordings will be used by the Principal Investigator to accurately capture the decisions and action plans of your group in a summary report you will receive after each workshop documenting your work together. The recordings will be available to be viewed by the Principal Investigator, co-investigators, and the IRB. The recordings will be held by the Principal Investigator and will be stored in a locked area to protect your privacy. They will be kept for 36 months after the end of the study and destroyed (deleted) after that time. Because you may be potentially identified by anyone who views the recordings, your confidentiality for things you say during the sessions cannot be guaranteed although the investigators will try to limit access to the recordings as described above and will request confidentiality of all participants.

What are the dangers to me?

Emotional discomfort:

The procedures and activities in this study may have unknown, unforeseeable risks. Such risks, however, are minimal and may include personal memories of other group work or situations that were uncomfortable in a workplace setting. Every invitation in these workshops is exactly that; an invitation. Every participant can choose to share only what they feel safe sharing with others. The workshops are intentionally designed to create a safe psychological environment where participants can explore issues without fear of being embarrassed or emotionally distressed. While some issues may be uncomfortable to address, it is the highest priority of the principal investigator to ensure that these issues are navigated with sensitivity and respect for all. The risks of emotional pain or stress that result from these workshops should be minimal because we will be focusing on issues and practices, not people.

Confidentiality:

If you do choose to share a personal experience or personal information during the course of the workshops, please be advised, as discussed above, that the presence of other participants and recording may impact your privacy. We cannot guarantee that other participants will not share your information outside of the sessions; however, we do ask that all participants respect the privacy of their co-participants and not share any information disclosed during the sessions.

The summary reports written by the principal investigator will not identify who said what, but only document the activities, decisions and action plans that the group collectively agrees to implement.

The interview responses obtained at the conclusion of the last workshop in October will not be included in the final summary report. These responses will be used only for the manuscript, however, there will be no identifying data attached to statements. You will only be able to be identified by the principal investigator. If there is the potential that someone could be identified by their words, the principal investigator will request permission from that individual before including it in the report.

Fatigue:

The workshops require considerable time for dialogue and discussion of issues and may cause fatigue, however, these group processes are designed to get people up and moving and having fun while doing important work. Additionally, there is a 15-minute break scheduled mid-way for each workshop.

If you have any questions about the research, your research rights, or have a research-related injury, please contact Barb Allen at the contact and address mentioned above. You may also contact the IRB at the numbers indicated above with questions as to your research rights.

Are there any benefits for taking part in this research study?

There are no benefits to you for participating in this study.

Will I get paid for being in the study? Will it cost me anything?

Owners will self-pay in participating in this study. All others will be offered a flat-fee for attending each workshop. It will cost you nothing to participate.

How will you keep my information private?

Confidentiality will be maintained to the best of our ability in this study. Your names will not be identified when presenting or writing a manuscript about the results of the study. Recordings, which may contain your name or other identifying information, will be held by the Principal Investigator and will be stored in a locked cabinet in her office area to protect privacy. Recordings will be destroyed (deleted) 36 months after the conclusion of the study. Participants are asked to respect the privacy of other participants and will be asked not to disclose any personal information shared within the sessions. All information obtained in this study will be strictly confidential unless disclosure is required by law. Also, the IRB and regulatory agencies may review research records.

What if I do not want to participate or I want to leave the study?

You have the right to refuse to participate or to withdraw from this research at any time without penalty. That is, you do not have to participate in the workshops, and if you should choose not to participate, this will have no negative impact on your standing at work. If you choose to withdraw, any information collected about you before the date you leave the study will be kept in the research records for 36 months from the conclusion of the study and may be used as a part of the research. You will not receive payment for any workshops not attended.

Considerations:

If significant new information relating to the study becomes available, which may relate to your willingness to continue to participate, this information will be provided to you by the Principal Investigator.

Voluntary Consent by Participant:

By signing below, you indicate that:

- This study has been explained to you
- You have read this document or it has been read to you
- Your questions about this research study have been answered
- You have been told that you may ask the researchers any study-related questions in the future or contact them in the event of a research-related injury
- You have been told that you may ask Institutional Review Board (IRB) personnel questions about your study rights
- You are entitled to a copy of this form after you have read and signed it
- You voluntarily agree to participate in the study entitled: "Leading Change Together: An Action Research Case Study Merging Liberating Structures Facilitation Methods with a Problem-Solving Model"

Participant's Signature:	Date:
Participant's Name:	Date:
Signature of Person Obtaining Consent:	
Date:	
Initials: Date:	

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Appendix F: Procedural Plan

Week	Activity	Cooperative Inquiry Phase
January 2016	 Write recruitment letter Approach organization leadership to participate in study Receive Letter of Permission 	Phase I
February 2016	Submit IRB	Phase I
February 2016	Talk/Meet with leadership and learn about their organization & wishes for this project	Phase I
March 2016	 Defend Proposal Record Informed Consent You Tube video and send link to participants Design the workshops to meet study requirements and participant organizational needs 	Phase I
April 4 th 2016	 Conduct Workshop #1 – April 4th Introduce study and get feedback on design and research questions Start going through problem-solving steps addressing their chosen initiative Reflection and dialogue on group processes 	Phase IV Phase I Phase II Phase III
April 2016	 April 11th: Submit feedback report to organization summarizing action plans and feedback on group processes Document procedures and results of Workshop #1 	Phase II Phase III
May 2016	 Continue to research and write <i>Chapter 2 (Literature Review)</i> Organization is in implementation/action phase 	Phase II Phase III
June 2016	 June 4th prepare for second workshop Continue to research and write <i>Chapter 2 (Literature Review)</i> & <i>Chapter 3 (Methods)</i> Organization is in implementation/action phase 	Phase II Phase III
July 9 th 2016	 Conduct Workshop #2 – July 9th Feedback report from participant reflections shared and discussed using liberating structures group facilitation methods (Reflection & Dialogue) Progress through problem-solving steps Action planning for next cycle Reflection and dialogue on group processes 	Phase IV Phase I Phase II Phase III

July 2016	 July 15th: Submit feedback report to organization summarizing action plans and feedback on group processes July 18th Document procedures and results of Workshop #2 	Phase II Phase III
August 2016	Organization is in implementation/action phase	Phase II Phase III
September 2016	 Organization is in implementation/action phase Prepare for Workshop #3 	Phase II Phase III
October 1 st 2016	 Conduct Workshop #3 – October 1st Feedback report from participant reflections shared and discussed using liberating structures group facilitation methods (Reflection & Dialogue) Progress through problem-solving steps Discussion on action plans moving forward without the researcher Reflection and dialogue on group processes Conduct one-on-one interviews with participants on site 	Phase IV Phase I Phase II Phase III
October 2016	 October 7th: Submit feedback report to organization summarizing action plans and feedback on group processes, including thanking organization for participation in study October 9th: Document procedures and results of Workshop #3 Transcribe interviews Code, analyze and develop themes. Write up results in summary findings Complete Discussions Chapters 	
November 1 st , 2016	• Submit completed dissertation to Dr. Georgakopoulos, Dr. Rice and Dr. Strawinska & Rice for review	
December 2016	Dissertation Defense	
Post- December	Revisions and Format Dissertation	

Appendix G: IRB Approval Letter



MEMORANDUM

To: Barbara J Allen, MBA

College of Humanities, Arts, and Social Sciences

From: John Miller, Ph.D,

Center Representative, Institutional Review Board

Date: March 15, 2016

Re: IRB #: 2016-72; Title, "Leading Change Together: An Action Research Case Study

Merging Liberating Structures Facilitation Methods with a Problem-Solving Model"

I have reviewed the above-referenced research protocol at the center level. Based on the information provided, I have determined that this study is exempt from further IRB review under **45 CFR 46.101(b)** (**Exempt Category 2**). You may proceed with your study as described to the IRB. As principal investigator, you must adhere to the following requirements:

- 1) CONSENT: If recruitment procedures include consent forms, they must be obtained in such a manner that they are clearly understood by the subjects and the process affords subjects the opportunity to ask questions, obtain detailed answers from those directly involved in the research, and have sufficient time to consider their participation after they have been provided this information. The subjects must be given a copy of the signed consent document, and a copy must be placed in a secure file separate from de-identified participant information. Record of informed consent must be retained for a minimum of three years from the conclusion of the study.
- 2) ADVERSE EVENTS/UNANTICIPATED PROBLEMS: The principal investigator is required to notify the IRB chair and me (954-262-5369 and John Miller, Ph.D, respectively) of any adverse reactions or unanticipated events that may develop as a result of this study. Reactions or events may include, but are not limited to, injury, depression as a result of participation in the study, lifethreatening situation, death, or loss of confidentiality/anonymity of subject. Approval may be withdrawn if the problem is serious.
- 3) AMENDMENTS: Any changes in the study (e.g., procedures, number or types of subjects, consent forms, investigators, etc.) must be approved by the IRB prior to implementation. Please be advised that changes in a study may require further review depending on the nature of the change. Please contact me with any questions regarding amendments or changes to your study.

The NSU IRB is in compliance with the requirements for the protection of human subjects prescribed in Part 46 of Title 45 of the Code of Federal Regulations (45 CFR 46) revised June 18, 1991.

Cc: Alexia Georgakopoulos, Ph.D.

Appendix H: IRB Amendment Letter



MEMORANDUM

To: Barbara Allen

College of Arts, Humanities and Social Sciences

From: William Smith, J.D.

Institutional Review Board Director

Date: May 4, 2016

Re: Leading Change Together: An Action Research Case Study Merging Liberating Structures

Facilitation Methods with a Problem-Solving Model—NSU IRB Protocol No. 2016-72

I have reviewed the amendment to change audio recording to video recording and to change online questionnaires to interviews. These changes do not affect the exempt status. Your study continues to be exempt from the regulations and you may continue to work on this project as described in the protocol and amendments.

Cc: Dr. John Miller

Dr. Alexia Georgakopoulos