Walden University

College of Education

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Linda S. Schurch

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Eric Riedel, Ph.D.

Walden University
2015

Abstract

Seducing Engagement: A Classic Grounded Theory Study of Virtual Leadership

by

Linda S. Schurch

MA, The Ohio State University, 1986

BS, The Ohio State University, 1982

Dissertation Submitted in Partial Fulfillment

of the Requirements for the Degree of

Doctor of Philosophy

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Abstract

Leading at a distance has emerged concurrently with complex global changes, resulting in the diverse use of technology, virtual teams, and collaboration as a way of solving problems and growing innovative and successful organizations. Little research has been done to explore the perceptions of individuals who lead virtual organizations. In the absence of such research, little is known about effective leadership processes in virtual environments. The purpose of this grounded theory study was to discover an explanatory theory, derived from data, which facilitates an understanding of effective virtual leadership systems and processes. This study used classic grounded theory methodology involving multiple extant data reviews (> 20) and a purposive sampling group of 77 virtual leaders, dispersed globally, who were interviewed using voice-over Internet protocol, phone contacts, and e-mail as data collection methods. The *grand tour* research question for this study examined issues leaders faced when leading/working virtually and the processes virtual leaders used to resolve the stated issues. Data were analyzed using open coding, sorting, memoing, constant comparative analysis, selective coding, and theoretical sampling. The key finding of this study was a generated *theory of seducing engagement*, addressing participants' main concern: the process of cultivating success in the virtual worker-learner. *Engagement* is viewed as a significant variable in successful virtual working, virtual leading, and organizational/company success. The results from this study might be used by global organizations to inform infrastructure and planning for virtual leading; to enhance the knowledge, training, and preparedness of virtual leaders; and to spur further research in a rapidly growing field.

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ProQuest LLC.
789 East Eisenhower Parkway
P.O. Box 1346
Ann Arbor, MI 48106 - 1346

Dedication

I dedicate this dissertation to my father, Gilbert D. Cook. My resolve and inspiration have been spurred and sustained by his interest in my academic pursuits and his continual encouragement to *contribute something each day* that will ultimately fulfill the requirements for the degree of Doctor of Philosophy. I love you, Papa.

Acknowledgments

The dissertation journey leading to the milestone of a PhD is substantive, is life changing, and is not a road that can be traveled alone. The support, encouragement, and patience of others provided the conditions for the PhD candidate to succeed. I am indebted to the following people, who have facilitated my accomplishment:

I would like to express my love and gratitude as I recognize my family for many years of affirming that "the end will eventually come" and *knowing* my love for them during my absences. I love you deeply.

I would like to thank Dr. Garfield and Dr. Lynn for their knowledge, expertise, collegiality, and counsel. I was truly blessed with the *dream team* for my dissertation committee. Dr. Garfield provided counsel over a 2-year period as I weighed my decision on the appropriate research design method, which was probably the most difficult decision for me in the formation of my doctoral expedition. The process of choosing the research design and framing the dissertation topic is a decisive element of any researcher's dissertation journey.

I would like to recognize the seminal theorist for classic grounded theory, Dr. Barney Glaser. I attended two Classic Grounded Theory (CGT) Troubleshooting Seminars (New York & California), and I participated virtually in a third seminar (held in the UK). There are no words to describe the sense of "awe" and deep honor to be trained in classic grounded theory from the master seminal theorist himself; it was a life-changing experience. I used several of Dr. Barney's quotes as my mantras, especially during the stages of developing Chapter 4.

Dr. Barney Glaser quotes (personal conversations, October 19-21, 2012; June 20-22, 2013):

- "you're confused ... stay that way"
- "the story is not the thing"
- "drop ideology ... it's just one more variable"
- "just do it!"
- “I look forward and seldom look or dwell back.. So I live more on what I am doing rather than what I did.. My orientation is future (still).”

I would like to thank Dr. Helen Scott and Dr. Judith Holton, fellows of the Grounded Theory Institute, for methodological mentoring, encouragement, and counsel. I am privileged to have the counsel of CGT fellows.

I recognize all the participants in my study—virtual leaders who are changing the paradigm of leadership globally.

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Chapter 1: Introduction to the Study

The topic of this study is virtual leadership. Virtual teams and virtual working are topics that have generated an increased research focus in the last few years, based on multifarious ways of working and communicating resulting from developing technologies and globalized market demands. This chapter includes the following components: (a) a brief summary of research related to virtual leadership, (b) verification of a gap in knowledge and scholarly contributions on the topic of virtual leadership, (c) the study's problem statement, (d) the purpose of the study, (e) the research questions, (f) the theoretical and conceptual framework for the study, (g) definitions related to the topic, (h) assumptions, (i) scope and delimitations, (j) limitations, (k) the significance of the study, and (l) a summary of Chapter 1 with a transition to Chapter 2.

Background

Leading at a distance has emerged concurrently with complex global changes, resulting in the inventive use of technology, virtual teams, and collaboration as a way of solving problems and growing innovative and successful organizations. In 2002, Bass forecasted that in 2034, virtual teams and e-leadership would "be the rule rather than the exception" (Bass, 2002, p. 383). His prediction holds significant value for today's focus on international presence and organizational/business structures that operate virtually. Research conducted in the areas of virtual teams, virtual leadership, and virtual working has been confined to virtual learning, the role of technology in learning and collaborative problem solving, knowledge sharing, and virtual learning teams that work. The topic of virtual leadership is not evident in research:

> One main reason that virtual working has remained unsatisfactory is that the leadership aspect of this work has been underestimated, if not completely forgotten. Most literature addresses mechanical aspects of virtual teams including task management and matters of work flow outcome. (Caulat, 2012, p. 8)

The phenomenon of virtual leadership requires a different paradigm for leading others, growing organizations, and contributing to innovative practices and processes. Ubiquitous trends, blended virtual strategies, and virtual world elements are recognized as pivotal tools for enterprise growth strategies (Kaye 2012, Chap. 1, para. 4). I have included research in Chapter 2 that supports current developments in the areas of virtual learning, working, and virtual teaming (including leadership dimensions); however, very little research has been completed in the area of virtual leadership, specifically research that explores the perceptions of individuals who lead virtual organizations relative to elements of effective leadership processes within virtual environments.

Present literature research on virtual leadership is nearly nonexistent and supports the identification of a gap on the topic of virtual leadership. The limited research on virtual leadership, as compared research on virtual learning, the role of technology in learning and collaborative problem solving, knowledge sharing, virtual learning teams that work, virtual teams and implications for leadership, and leadership effectiveness in global teams established the need for research and resulted in an emergent theory.

Problem Statement

The problem identified in this study was that little research has been done on the perceptions of individuals who lead virtual organizations relative to key factors of

effective leadership processes within virtual environments. In the absence of such research, little is known about effective leadership processes in virtual environments. Technology has changed the way individuals communicate, collaborate, problem solve, lead, and manage virtual organizations. There is a need to understand key factors inherent in effective systems and processes of leadership within virtual learning organizations. This research provides virtual leaders with additional information and makes substantive contributions about effective leadership processes in virtual environments. The consideration and inclusion of systems thinking has yielded notable levels of understanding, leadership, and effectual change in relation to global influences on organizations, including subsystems (Andreadis, 2009; Scharmer, 2007; Senge, 2010; Stebbins, 2010; Stegall, 2003).

Purpose of the Study

The purpose of this grounded theory (GT) study was to discover an explanatory theory derived from data, which facilitates an understanding of virtual leadership, including aspects of systems and processes. Through this study, I pursued an exploration of virtual leadership leading to an emergent-patterned core dimension or facet that will inform practice and advance the phenomenon of virtual leadership.

Research Questions

The following research questions framed this grounded theory study:

- What theory explains the effectiveness of a leader in his or her role within a virtual organization?

- What are key elements of effective leadership systems and processes in the virtual organization?
- What is the role of collaboration (if any) in virtual leadership?
- What specific interaction issues and systemic conditions influence the virtual leader's strategies?
- How do leaders of virtual organizations perceive the qualities of effective leadership skills for virtual organizations?
- What is the role of technology in communication, collaboration, problem solving/decision making, and effective leadership processes within the virtual leadership system?

Theoretical and Conceptual Framework for the Study

A classic grounded theory design results in the generation of hypotheses from data. It does not use theories found in literature until a core variable emerges and the generated theory is established enough to accommodate other research results through the process of constant comparison (Glaser, 1998, p. 76). A theoretical framework that provides a general depiction of identified relationships between and among variables of a phenomenon, based on a tested theory, would not be applicable in a classic grounded theory study. As the field of virtual leadership is an emergent discipline with limited research findings, the classic grounded theory design was selected in order to generate a hypothesis from data. By nature of the classic grounded theory design, there was no initial conceptual framework. Identifying a conceptual framework prior to the data analysis would result in the propensity to preconceive coding categories and constant

comparative analysis themes, which would contradict the essence and nature of classic grounded theory. The chosen design does not use theories found in literature until the core variable emerges with the theory established enough to assimilate other research results from a review of literature (Glaser, 1998, p. 76). To this end, the literature review was incorporated into emerged subcategories, properties, structural conditions, and dimensions directly from the data, within the results section of Chapter 3. I chose the grounded theory design because the present review of literature included areas such as virtual learning, collaborative work teams, the role of technology in learning, and leadership effectiveness in global teams; however, there is little research documented in the area of virtual leadership systems and processes. I used the components and parameters of classic grounded theory as my conceptual framework for this study, ensuring conceptual framework emersion through the process of data analysis and directly from the data. My initial literature review, resulting in the identification of a significant void in documented research on virtual leadership, suggested that systems theory and learning theory have influenced the aforementioned related areas but have not directly addressed the chosen topic of virtual leadership.

Systems theory has had a profound effect on the science of management and leadership, fostering a deep understanding of organizations/organizational practices. Systems thinking represents validated management practices that have been in use since the 1920s. A conceptual framework and working knowledge of the model is a presencing (the ability to sense and bring into the present one's highest future potential as an individual and as a group) phenomenon for the virtual organization (Andreadis, 2009;

Scharmer, 2007; Senge, 2010). Systems and knowledge become grounded in a context (such as a virtual organization) where intention is spurred through the inclusion of awareness, wisdom, and intuition; leaders and people at all levels in all systems are increasingly presented with disruptive challenges and changes that require them to let go of old patterns of thinking and behavior and to sense new future possibilities. These challenges may be techno-economic, relational-political, or cultural-spiritual—or all three (Scharmer, 2007, p. 227). A as a result of political, economic, and social considerations, organizations face changes that require a set of assumptions guided by interdependent and interconnected operational practices (Scharmer, 2007; Senge, 2010). Change is ineluctable, and virtual leaders must embrace a paradigm of anticipating, accepting, and using systems thinking to become effective and influential agents of positive change.

The field of virtual learning and leadership research is an emergent discipline. Research that illumines the organizational leader–learner's understanding of effective elements in leadership through technology is paramount to future design of virtual learning environments and virtual organizational structures. The research topic of virtual leadership is meaningful to prospective leaders of virtual environments who want to learn from best practices in virtual leadership. The reviewed literature is generally premised on learning theory and does not directly address the topic of virtual leadership (Cradler, 2003; Ikpeze, 2007; Magnussen, 2006; Salmons, 2005; Smith, 2006; Tseng, Ku, Wang, & Sun, 2009) and contributes to technology tools (Elliot, 2006; Gregg, 2007; Liarokapis, 2007; Lu & Yeh, 2008; Tompkins & Weinreich, 2007; Vakola & Wilson, 2004; Verstegen, Barnard, & Pilot, 2008) in conjunction with meaningful practices that

facilitate instructional design elements of the integrated virtual learning environment (Cleary & Marcus-Quinn, 2008; Clutterbuck, 2002; Dickey, 2003).

New workplaces are evolving, which are global, virtual, and collaborative (Caulat, 2012; Curseu, Schalk, & Wessel, 2008; Dani, Burns, Buckhouse, & Kockhar, 2006; Kaye, 2012; Majchra, Malhotra, & John, 2005; Schalk, Curseu, & Petru, 2010; Schalk & Wessel, 2008; Sitek, Seifert, & Thoben, 2010; Tubin, 2007). The focus on virtual leadership as opposed to effective management of virtual teams has been limited (Caulat, 2012; Herremans & Isaac, 2005; Kolb, Prussia, & Francoeur, 2009; Power, 2007; Yukl, 2006).

Nature of the Study

This classic grounded theory study examined virtual leadership systems and processes and the perceptions of individuals who hold leadership positions in virtual organizations. The interest and purpose of this study was to pursue an exploration of virtual leadership leading to an emergent-patterned core dimension or facet that informs practice and advances the phenomenon of virtual leadership. The concepts and methodology inherent in classical grounded theory are particularized in Chapters 2 and 3 of this paper. Primary contributions of classical grounded theory include the capacity to frame-in the views of participants' perceived lived experiences with rigor and integrity in the data analysis. Glaser (1998) spoke on the rigor of grounded theory:

> The rigor of grounded theory is as stringent as it is in the more forcing or quantitative methods of survey and control oriented research. In grounded theory interpretations of hypotheses are constantly checked by the constant comparative

> method. They are as much a part of the theory and as grounded in it, as the main concern and its continual resolving … In grounded theory interpretations are all rigorously induced from data, if the full process of constant comparison is followed. (pp. 11-12)

The aim of grounded theory is to show how such a theory "fits empirical situations, and is understandable to sociologists and layman alike … it works—provides us with relevant predictions, explanations, interpretations, and applications" (Glaser & Strauss, 1967, p. 1). Grounded theory is a method for both data collection and analysis and was chosen for its alignment to the research questions and its inherent capacity to facilitate conceptualization of behavior patterns in which people are engaged (Glaser, 1978, 1992, 1998). Inherent benefits of classical grounded theory include the following:

- To enable prediction and explanation of behavior
- To be useful in theoretical advance [*sic*] in sociology
- To be usable in practical applications and give the practitioner understanding and some control of situations
- To provide a perspective on behavior—a stance to be taken toward data
- To guide and provide a style for research on particular areas of behavior (Glaser & Strauss, 1967, p. 3).

I followed the identified methodological stages in conducting classical grounded theory as described in Chapter 3 of this study: (a) identifying the substantive area and minimizing preconceptions regarding such, (b) collecting data, (c) open coding data as they are collected while remaining open to emergent codes, (d) writing memos

throughout the research process, (e) conducting selective coding and theoretical sampling, (f) sorting written memos and finding best-fit theoretical codes, (g) reviewing relevant literature and integrating it with the substantive theory, and (h) writing up the theory (Glaser, 1978, 1998). During the process of theory development, the above stages were not followed in their listed order; with the exception of actual theory generation, I immersed myself in each stage separately but simultaneously, resulting in measures reducing preconceptions and assuring theoretical sensitivity through constant comparative analysis.

Definitions

Change agentry: Change agentry is a concept that is used to improve the climate for working, learning, and doing business; every organizational change, no matter its size or significance, requires at least one change agent. The role of the identified change agent is beneficent, and for the good of the individual, group, organization, and community at large. Lippitt, Watson, and Westley (1958) identified professional helpers, who solve organizational and system-wide problems, as change agents. Change agents can be consultants, specialists, adult educators, administrators, or organizers. The goal of the change agent is to improve entire systems, and the change agent's specialized skills and expertise bring methodological and end-state goals into fruition. Change agents can assume various roles—(a) training, (b) consulting, and (c) research—and are distinguished by the following characteristics (Lunenburg, 2010, pp. 2-3):

- openness
- adequate capacity

- structuring
- empathy
- proximity
- synergy
- energy
- reward

Becoming an agent of change is a major factor in the success of an organization (money, competition, and careers). According to Lunenburg (2010), effective change management builds credibility.

Presencing. Scharmer (2007) explored the paradigm of presencing as a vital element of transformational leaders. Presencing infuses the ability to connect with a higher source, a place in the future of one's knowing in order to make possibilities real. Presencing infuses elements of presence and sensing, resulting in an individual's heightened potential to perceive, respond intuitively, and act in such a manner as to potentiate the fruition of such (Scharmer, 2007, p.8).

Transformational leadership: A specific leadership typology described in the seminal work of Burns in 1978 (Bass, 1990) that differentiates elements and concepts of leadership today. Transformational leadership spurs systemic change, through innovative practices, authenticity, and deep connection with individuals to the mission and vision of the organization (Tichy & Devanna, 1990, p. xii); a leadership process, which can be strategically developed, is systematic and has the potential to transform organizations (Drucker, 1954). Inherent features of transformational leadership include customer

focus, integrity, aggressive achievement, courage, and passion to foster innovation, creativity, excellence, and pride (Avolio & Yammarino, 2002; Clawson, 2003). Characteristics that distinguish the transformational leader from others include the following (Tichy & Devanna, 1990, p. xii):

1. Transformational leaders take responsibility to make a difference in the organization. This includes the continual review of structure and processes needed to support leadership, assurance of shared and operational vision, the establishment and care of stakeholders, distribution of power and authority among agency workers, demonstration of equity, and celebration of success (Denning, 2005).
2. Transformational leaders demonstrate courage and take risks in new opportunities for followers, the organization, and community at large.
3. Transformational leaders believe in people, model integrity and authenticity by showing respect for others, practice honesty and accountability, and are value-driven.
4. Transformational leaders are lifelong learners, promote growth and professional practice, nurture and support the training and development of staff, seek feedback and reflection from others, expect what is considered exceptional from people, use authentic intuition in promoting progress and celebrate success.

Tichy and Devanna (1990) identified the following sequence in transforming an organization:

1. recognize the need for change,
2. manage the transition,
3. create a new vision, and
4. institutionalize the changes.

Virtual organization: The terms *virtual organization*, *virtual enterprise*, and *ambient organization* (*amborg*) refer to organizations where networked entities, enabled by emerging technologies, capitalize on virtual tools and resources, communication, and collaboration schemes, defining agile and flexible structures and business models to create and grow sustainable value (Bjorn-Andersen, 2003).

Virtual world: Interactive virtual environment where multiple users take the form of avatars visible to others and where users can interact with each other and create virtual objects. Virtual worlds can also include elements of 3D (solid geometrical characteristics of volume), social networks, and games (Kaye, 2010, Chap. 1, para. 6).

Assumptions

For the purposes of this grounded theory study, a major assumption was that the participants would be honest and adequately objective about their perceptions. I assumed that the participants who volunteered represented successful virtual leaders who demonstrated innovations in virtual learning organizations throughout the world. I assumed that I would be able to take sufficient measures to limit my own preconceptions and present unbiased results with integrity. Postponing the literature review in the targeted substantive area and related areas of the research is one such inherent measure used in classical grounded theory (Glaser, 1998).

Scope and Delimitations

Virtual leadership is a relatively new and unresearched topic. I interviewed virtual leaders holding such positions in successful and innovative virtual organizations. Initial interviews included virtual leaders of organizations who provided or marketed learning–business content and/or instruction. I followed the classic GT model, which uses theoretical sensitivity, coding, and constant comparative analysis of the data. The methodology inherent in GT design guided the subsequent interview selection and process. Relative to analytic rules with the goal of promoting a single, explanatory variable,

> While theoretical coding establishes the relationship among variables, analytic rules guide the construction of the theory as it emerges. They guide the theoretical sorting and the subsequent writing of the theory. They detail operations, specify foci, and delimit and select the use of data and concepts. Analytic rules can be on and about anything that is related to generating the theory …. Analytic rules provide the necessary disciplines for sticking to and keeping track of the central theme, as the total theory is generated. (Glaser, 1978, pp. 120-121)

I remained cognizant of the following basic analytic rules as I remained open to what emerged during my study, in alignment with the aforementioned goal (Glaser, 1978, pp. 121-125):

- Begin sorting memos as soon as the first interview is completed and data coded.

- Begin sorting all other categories and properties only as they relate to the core category or basic social process (BSP).
- Because the goal is to promote a single variable to explain some variation in a problem as it is processed, one core variable must be promoted to the center, and the others should be demoted to a subcore variable.
- A proliferation of memos will facilitate saturation when the constant comparisons generate many new ideas.
- Conceptually carry-forward related categories to subsequent sorts and the use of each concept from the point of its first introduction into the theory.
- All ideas must fit somewhere in the outline using constant questioning and comparing each idea to the emerging outline.
- The conceptual sorting occurs on at least two levels (sections, then within sections or chapters, then sections within chapters) using sorting and resorting, which constantly confirm integrative fit.
- Upon theoretical completeness, stop sorting.

Limitations

This grounded theory study presents the participants' overt latent patterns of behavior. The following limitations need to be considered in evaluating the implications and recommendations of the study: (a) the study was limited to virtual leaders; the theory generated is limited to leaders within the scope of virtual organizations; (b) this study examined a retrospective view of the participants' perceptions and descriptions of accounts within their practice, which may include levels of recall bias; and (c) this study

used interviews in which participants provided perceived ideas rather than direct observations in authentic lived experience. The participants might have behaved differently in reality as compared to the perceptions of the lived experience.

I used the constant comparative analysis method, which delimited the amount of data needed. According to Glaser (1998, p. 26), this is a notable method for generating emergent concepts from codes resulting in theory emergence. I intermingled my field observations with interviews, which contributed to theoretical completeness, according to Glaser (1998, p. 26).

Significance

Advances in technologies support innovative models of business systems and structures. As impediments of time zones, interactions between local-global communities, proximity, and skill-sets align with these advances, virtual leadership will become the norm rather than the exception (Colfax, Santos, & Diego, 2009; Kerfoot, 2010). Resulting is the need to research various components of ubiquitous leading-learning models to provide a better understanding of systems and processes of leadership within innovative and transformational virtual learning organizations.

Effective virtual leadership has the capacity to increase an organization's responsiveness and agility within the competitive global market; research aimed at understanding the systems and processes of virtual leadership deserves more attention and can have substantive impact on organizations and employees within them. Virtual leadership is becoming attractive, and research using virtual context is sought after. Significant benefits and implications of this study include the following:

- Financial and training variables for new virtual leaders can be effectively explored.
- Assurances for effective future performance outcomes for organizations who participate in virtual leadership training.
- Through the identification of a theory grounded in data, a core category with an integrated set of hypotheses within the topic of virtual leadership will contribute to the body of knowledge regarding the core category.
- Further exploration and inquiry into targeted aspects of virtual leadership will enable researchers to transcend traditional leadership categories.

The significance of using a grounded theory approach to the topic of virtual leadership is that the emergent theory is grounded in data provided by virtual leaders as practitioners and has significant potential for social change.

Summary

Virtual leadership requires a different paradigm for change agentry, transformational leadership, and skills formation for technology and learning. Inherent in the change process is the understanding and affirmation that virtual organizations are essentially social network systems; technology has transformed the capacity of the customer/learner/ follower to transform into the actual leader of the organization (Aviolio & Yammarino, 2002). Emergent technology is integrated into every aspect of the organization, permitting customers to use, evaluate, question, and demand goods and services through an electronic decision-making system. The resulting phenomenon requires collaborative leadership practices that include relationship unification, support,

endorsement, and problem solving within the borderless organizations. Transformational leadership facilitates the interconnection between technology and the customer/learner/follower.

Research in the area of virtual leadership, virtual classrooms, virtual organizations, and e-learning necessitates the use of multiple domains in formulating meaningful contributions, and refinements in present models for virtual leadership, teaching, and learning design and implementation. Efforts to monitor, review, validate, and disseminate e-learning, e-leading, and virtual leadership research will contribute to a *best practice approach* in research. Change is unavoidable, and virtual leaders must embrace a paradigm of anticipating, accepting, and growing to become agents of change. Technology in teaching and leading promotes effective information handling, problem solving, product design, data analysis, collaboration, and innovative practices.

Chapter 2 includes a brief review of the literature that establishes the significance of the phenomenon and affirms the gap in research on the perceptions of individuals who lead virtual organizations relative to elements of effective leadership processes within virtual environments. I have listed the library databases used and key word search terms resulting in the established gap in research on the topic of virtual leadership. Literature is used in this classic grounded theory study to compare emergent categories. A full literature review prior to the study would have resulted in full preconception of the received data/concepts, an overfocus on the supposed problem, and a potential to force a framework (Glaser, 2003, p. 202). To this end, a summary of the existing knowledge and

a review of significant literature were conducted after the theory was generated from data.

Chapter 2: Literature Review

The problem identified in this study is that little research has been done that explores the perceptions of individuals who lead virtual organizations relative to key factors of effective leadership processes within virtual environments. In the absence of such research, little is known about effective leadership processes in virtual environments. Technology has changed the way individuals communicate, collaborate, problem solve, lead, and manage virtual organizations. There is a need to understand key features inherent in effective systems and processes of leadership within virtual learning organizations. This research will inform virtual leaders and make substantive contributions about effective leadership processes in virtual environments. The consideration and inclusion of systems thinking has yielded notable levels of understanding, leadership, and effectual change, considering global influences on organizations, including subsystems (Andreadis, 2009; Scharmer, 2007; Senge, 2010; Stebbins, 2010; Stegall, 2003).

The purpose of this grounded theory (GT) study was to discover an explanatory theory derived from data, which facilitates an understanding of effective virtual leadership systems and processes. In this study, I pursued an exploration of virtual leadership leading to an emergent patterned core dimension or facet that informs practice and advances the phenomenon of virtual leadership.

Because this is a classic grounded theory study, elements generally included in a literature review are inherent in the results section of Chapter 4 of the dissertation. Grounded theory uses constant comparative analysis of collected data; no literature is

appraised or included within the framework of a GT study unless it supports the emergent theory. Themes emerged from the data to support theory formation. Grounded theory methodology is inductive, data directed, and systematic (Glaser, 1978, 1992, 1998, 2001, 2003, 2005, 2011; Glaser & Strauss, 1967).

I have included research that supports current developments in the areas of virtual learning and virtual teaming (including leadership dimensions); however, very little research has been completed in the area of virtual leadership, specifically research that explores the perceptions of individuals who lead virtual organizations relative to elements of effective leadership processes within virtual environments. The information in this section supports the gap that exists for the topic of virtual leadership and establishes the need for research, which resulted in an emergent theory.

In this chapter, I include applicable literature search strategy components, an overview of the theoretical foundation as appropriate for a grounded theory study, and current literature on the topics that emerged when conducting a literature review using library databases and search engines for the topic of virtual leadership, each supporting the gap in literature.

The literature presented includes areas such as virtual learning, the role of technology in learning and collaborative problem solving, knowledge sharing, virtual learning teams that work, virtual teams and implications for leadership, and leadership effectiveness in global teams. Most, if not all, reviewed literature was premised on learning theory and/or systems theory, including Theory U (Scharmer, 2007). None of

the literature reviewed addressed the stated problem and research questions identified in this grounded theory study.

Literature Search Strategy

The literature review for this grounded study was conducted following the generation of an inductively emerged theory. According to Glaser (2011),

> The researcher doing the CC [constant comparison] method and remaining open to what is going on in the data and coding it abstractly soon reduces the "what ought to be" to "what is." The literature and the library are always there. They do not disappear. Literature can be related to the final GT to bring it (both literature and GT) into the main stream of current thought within the field. (p. 28)

A comprehensive literature review was generated upon theory emergence as related to the substantive area that resulted from the constant comparative analysis of the data. This allowed me as the researcher to be "free and as open as possible to discovery and to emergence of concepts, problems, and interpretations from the data" (Glaser, 1998, p. 67).

The presented review of literature, verifying the absence of research related to virtual leadership, was established using databases such as Proquest Central, EBSCOhost, SAGE Premier, ERIC, and Dissertations and Theses. Additional research augmenting the above topics was suggested by doctoral leadership during targeted conferences and advising reviews inherent in the residency fulfillment process. Key search terms resulting in alternate topics included

- Virtual leadership

- Ubiquitous leadership
- Online leadership
- Distance leadership
- Organizational cybernetics
- Innovative virtual organizations
- Affinity distance

Advanced search field options included limits such as peer-reviewed and full text; Date range field options included research conducted within the last 5 years.

Theoretical Foundation

While there is little research documented relative to effective virtual leadership systems and processes, the field of *virtual learning* research remains an emergent discipline in comparison with other innovative technologies. Solid research that illumines organizational learners' understanding of effective elements in innovative technology is paramount to future design of the virtual learning environment and virtual organizational structures. The reviewed literature is generally premised on learning theory and contributes to technology tools in conjunction with meaningful practices that facilitate portions of the integrated virtual learning environment.

Role of Technology in Leadership and Theory

In 1983, Clark reviewed comparative research literature on media and determined that there was no evidence that media had an impact on learning. Media were viewed simply as vehicles for instruction delivery and had little influence on the actual learning that transpired. Kozma (1994) revisited Clark's review, providing insightful speculation

as to the previous failure to connect a meaningful relationship between media and learning. The learning theories, educational design, and instructional strategies of this decade were connected with behavioral origins; media functioned as the s*timulus* for learning response, thus functioning as any other stimulus that elicited a response.

Kozma (1994) predicted that the near future would include the presentation of merging interactive technology, such as cable television, interactive video, and digital computers. He expressed concern that unless individuals develop and understand the impact between media and learning, the potential for monumental educational impact would never be realized. He reinforced that educational technology is indeed a phenomenon that includes products and ideas that have been created, and if there were not an evidenced relationship between media and learning, it would be because this connection has not yet been made.

Kozma (1994) analyzed conditions within two notable learning environments and presented findings supporting the integration of technology and method within the context of teaching and learning. He used the constructivist, social models of learning, rather than the behavioral models prevalent in Clark's conclusions, to reframe the knowledge and understanding of the relationship between media and learning (Kozma, 1994). Technology tools facilitating learning included the combination of media access to valued social situations resulting in collaborative learning and problem solving. An example given by Kozma involves a science class researching local water quality with self-generated video stories communicating the importance of water quality, resulting in

numerous opportunities to make significant impact on legislation and the community at large.

Kozma's contributions to the redesign of an education model embracing the value of educational technology in learning and the need for ongoing evaluation efforts are significant, relative to learning context and instructional design. Today, Clark's position continues to present the technology system as the vehicle for delivering instructional strategies and program objectives; the efforts should be on the evaluation and enhancement of the instructional design rather than the delivery system. Kozma continued to hold an opposing position and advocated the research and evaluation of the relationship between instructional strategies and delivery system technologies in the evaluation of meaningful learning.

Kozma (1994) stated,

> The technology medium does not emerge until the users interact with it—take their turn in the conversation. The emergent design will be influenced by the goals, beliefs, and knowledge of the users, as well as the intentions of the designer, as embedded in the designed object. (pp. 21-22)

Evaluation is vital in the development and design of learning-instructional strategies including learning technologies; pedagogical model selection is also inherent in this framework (Alexander, 2006). Several articles support noted growth and development in the virtual learning environment, and resulting emergent technologies reveal the Learning Management Content System (LCMS) as the platform of choice for organizations and companies that are doing business via virtual environments (Robbins,

2002). The author identified key components of an effective LCMS: (a) easy-to-use creation tools for content, (b) flexible course design and delivery, (c) support for the reuse of content objects, (d) administrative applications including collaborative communication functions, (e) automated implementation process, and (f) effective evaluation-assessment tools.

Collaborative activity in virtual learning environments is presently identified as an essential learning strategy supporting effective teaching and learning (Dabbagh & Bannon-Ritland, 2005). Assessing collaboration through effective educational technology will continue to be at the forefront of technology research interests (Salmons, 2005).

Research projects proliferate that identify innovative use and application of technology in shaping learning environments (including exploration, experimentation, discovery, collaboration, authentic application, and play) and facilitate seamless blending and integration of curricula design and learning strategy (Salmons, 2005). Technology research continues to change, as the field of technology is multifarious and integrates many components of education (Caffarella & Zinn, 1999).

Technology-Supported Interaction and Collaboration

Dabbagh and Bannan-Ritland (2005) discussed learning as a social process, as the acquisition of knowledge involves continuous new meaning based on meaningful interactions, situational context, and interactions with other learners. A community of practice is the result of the aforementioned framework. Technology has influenced tools for learning, elements of interaction, and related learning pedagogies.

Various pedagogical tools are provided within the synchronous learning environment that facilitate a multitude of interconnected learning activities, learning styles, proximity profiles, and academic/professional disciplines (Rybariczyk, 2007). Innovative learning strategies can be accommodating to the numerous reasons for online learning. Case studies and simulations are used in many online programs, as they offer situational opportunities for dialogue and collaborative problem solving. Virtual organizations offer realistic settings, data access and analysis, and evaluation of needed information while locating the needed data and opportunities to collaborate through enculturation (Dabbagh & Bannan-Ritland, 2005). While the results of case studies remain static, virtual organizations continue to grow and change. Virtual organization tools for learning provide a multisensory approach and accommodate many learning styles in conjunction with authentic learning tasks, just-in-time information, and supportive innovation (Wright, 2005).

The act of sharing ideas, learning experiences/knowledge, and plans can have paramount impact on the novice and expert learner, the virtual organization, and the community at large. Collaboration is indeed a meaningful aspect of effective teaching and learning. Today, educators are embracing the reality that traditional learning exchanges are not quite enough in assuring that critical thinking and information literacy are developing, alive, and well in the classroom (Lightner, Bober, & Willi, 2007). Real-world problem solving, team collaboration exercises, and virtual organization involvement encourage authentic application of learning and collaborative experiences with learning partners. The above authors found that when access to technology and

exposure to creative collaborative opportunities were provided, students responded positively and viewed these experiences as stimulating, resulting in the active pursuit of further engagement and collaboration within the learning environment (Lightner et al., 2007).

A synthesis of the literature review suggests meaningful considerations for leaders in virtual environments: (a) assisting learners with understanding the nature and purpose of activities and learning team assignments, (b) creating an evaluation tool that correlates with the purpose of the group, (c) developing best practices in forming groups (using charters), and (d) modeling effective team functioning.

Virtual learning environments rely on the use of Internet and web-based technologies for effective teaching and learning and include the following attributes: (a) technologies facilitate knowledge building and meaningful learning; (b) collaborative interactions include multiple levels, such as learner-learner, learner-content, learner-teacher/facilitator, and learner-group; and (c) teaching and learning activities occur synchronously, asynchronously, and through a multitude of technologies.

The collaboration of pedagogy and learning design is a monumental contribution to building motivation and excitement for learning; however, most research on social and peer learning was executed prior to virtual learning/Internet options and the use of collaboration in higher level learning (Salmons, 2005). The relationship among collaboration, motivation in learning, and learning outcome is an excellent area for needed research and has been noted as a gap in knowledge in the area of virtual leadership.

Collaborative learning equals *synergy*; the result is an outcome that is greater than the sum of each individual's separate effects, including motivation for learning.

Social technology for leadership. Scharmer (2007) used collaborative action research over a 10-year span to explore a new paradigm called *presencing*, or the ability to connect with a higher source, a place in the future of one's knowing. Presencing infuses elements of presence and sensing, resulting in an individual's heightened potential to perceive, respond intuitively, and act in such a manner as to potentiate the fruition of such (Scharmer, 2007, p. 8). Scharmer's framework for social technology transcends societal transformation and includes systemic impact that begins with individual renewal (Scharmer, 2007, p. 5). Leaders, according to Scharmer, include all people who engage in creating change or shaping the future, regardless of any position held. Theory U is a theory, a model, and a method to discover the essence of leadership as a lifelong process of knowing self and through a transformative process, contributing to social innovation (Scharmer, 2007). The "U" process is the deeper place where Scharmer suggested that transformational leaders operate; they pull the individual into an emerging state of future possibilities. His research investigated elements that grow a person's capacity to "sense, tune in, and act from one's highest future potential—the future that depends on use to bring it into being" (Scharmer, 2007, p.8). The social space within the "U" process concerns the quality of how one attends to matters of the world, each dependent on four different positions of one's attentive framework. The positions include the following: (a) what individuals perceive, based on developed habits of seeing the world; (b) what individuals can see, with their senses and mind wide open; (c) what

can be seen, with the heart wide open; and (d) what can be understood, with an open will. Effective leadership moves from the first and second levels to the third and fourth levels, resulting in profound renewal and change (Scharmer, 2007, p. 14).

Scharmer (2007) described the *blind spot* as the place where all attention /inattention originates. He reflected, "My most important insight has been that there are *two different sources* of learning: learning from the experiences of the *past* and learning from the *future* as it emerges" (Scharmer, 2007, p.7). The "U" process includes mind blending reflective thinking where authentic results can be realized. Five key insights to this paradigm shift in leadership technology, according to Scharmer's Theory U (2007), include: (a) cultivation of the open mind, open heart, and open will, to develop a new social technology on a collective and collaborative level; (b) the most important leadership tool is yourself, emerging into an authentic presence of self; (c) the leader must work with three enemies of the inner self, the voice of judgment, the voice of cynicism, and the voice of fear; (d) the "U" is a living field, where each component reflects the whole, in a prescriptive way; and (e) to experience the practice of presencing, one must *absence*, or *let go* of the destructive voices and operate from the future as it emerges.

Scharmer (2007, pp. 119-215) described core processes for mapping the "U" including the following:

- *Downloading* is the capacity to break the cycle of habitual patterns of the past, in order to position self or organization for new patterns to *emerge*. Organizational obstacles to downloading include not recognizing what is

observable, not saying what is thought, not doing what is said, and not seeing what is done.

- *Seeing* includes the principles of clarifying intent, moving into contexts that matter, and suspending judgment and connecting to wonder.
- *Sensing* is the capacity to transcend the feedback cycle of habit patterns of past, in order to fully participate in the cycle of change as a whole; resulting is the deep diving experience down the left side of the "U", into an open heart, followed by moving up the right side of the "U", into a creating mode.
- *Presencing* is the capacity to look to future possibilities and making it real.
- *Crystallizing* is clarifying the emergent vision into the future of possibilities. It involves mindful intention, grand will, letting come, and moving toward the flow of a creation state.
- *Prototyping* is remaining connected to the mindful intention, moving away from the habitual past and status quo, to the emerging future.
- *Performing* is where the newly formed patterns emerge and connect to the system where innovation resides.

Scharmer's (2007) theoretical application of transformational leadership provides practical application and meaningful connections for leaders in virtual organizations.

Virtual leadership dimensions. New workplaces are evolving, which are global, virtual, and collaborative. The literature review suggests that inherent challenges in virtual organizations include feelings of confusion and isolation; however, with collaborative leadership and person-centered decision making, virtual leaders can develop

and promote team cohesion, clarity, and a sense of community. Proactivity builds virtual team confidence and a mindset of cohesiveness. Parchoma (2005) relayed that cultural diversity, within virtual organizations, can anchor creativity and customer responsiveness. Two facets of cultural intelligence that demand consideration from a transformational virtual leader include the recognition of the impact of cultural values on a team, and the support of individual differences, in order to build the environment necessary for effectual change.

Virtual organizations and teams need to build trust factors early; however, the virtual environment does not readily provide inherent conditions supporting trust factors. To this end, the effective virtual leader, makes authentic connections, collaborates, communicates frequently, assures accessibility, keeps followers informed, and practices the presence of what is desired for others. Transformational leadership is critical in the collaborative efforts of innovative practices, as successful change agentry begins with the self-examination process. The ability to conduct an authentic reflective self-appraisal is a distinctive feature of leadership and foundational for ubiquitous innovation.

Yukl (2006, p. 49), identified the following guides in leadership design for virtual organizations:

1. Develop a personal vision of career objectives.
2. Seek appropriate mentors.
3. Seek challenging assignments.
4. Improve self-monitoring.
5. Seek relevant feedback.

6. Learn from mistakes.
7. Learn to view events from multiple perspectives.
8. Be skeptical of easy answers.

Coordinated training, education, and development assure best practice and can be easily supported by a strong learning culture, and integrated with a variety of professional growth and development activities such as academic/career counseling, performance appraisal, developmental assessment centers, and learning climate considerations (Yukl, 2006).

In the virtual organization, technology is a means, not an end. Purposeful selection of technology will assure mediated precision. A noteworthy goal in virtual leadership is to spur collaboration, for innovative practice, and successful results. Virtual leadership and teamwork is on the rise, and collaborative technologies facilitate the development of skill sets for the future.

Pedagogical Approaches

Essential pedagogical considerations for innovative virtual learning environments are in the forefront in current training markets for professional development, course content, training, and all levels of education (Cradler, 2003). Students are active agents and collaborate, construct, create, problem solve, and evaluate, in the virtual setting, using technology tools, and the instructor as a facilitator. The instructor is a co-explorer, who enables learners to visualize project outcomes and identify with their roles, in conjunction with possibilities for contributions. The virtual learning environment is dynamic, interactive, and connects learning to authentic practice (Tseng, Ku, Chien-Hsin,

and Sun, 2009). Smith (2006) cited the following essential elements in virtual instructional design consideration, resulting in learning through inquiry and higher level thinking: (a) visual representation, (b) collaborative peer learning, (c) scaffolding, and (d) evaluative revisions.

Ikpeze (2007) summarized research findings suggesting that small group, collaborative peer discussions within the electronic learning environment, facilitate learner empowerment, deep level thinking, and authentic application to learning. Cradler (2003) listed the following considerations in constructing an effective pedagogical model for virtual teaching and learning design:

1. Collaborative learning team opportunities are evidenced on line or face-to-face.
2. Learners are immersed in technology as they explore new ideas and have unlimited opportunity for independent research.
3. Learners have opportunities to create projects and artifacts that connect to scholarly practice.
4. Assessments are created to facilitate student's opportunity for self-examination and reflection on learning.
5. Authentic learning experiences are focal points and spur redirective learning.
6. Meaningful forms of interaction include learner-instructor, learner-learner, learner-content; interactions result in synergy and satisfaction.
7. A mix of tasks and authentic activities stimulate learning in a variety of ways.

Intelligent Collaborative Learning

Online learning, virtual learning, e-learning, and also known as *electronically delivered learning,* is presently considered a consequential new approach to teaching and learning in the field of education, with research supporting the speculation that virtual learning will impact education in America, and the global world population (Harvard & Xu, 2008). The review of literature indicates that the instructional design industry is evolving from online and blended courses, toward rapid e-learning, platforms that include audio, video, integrative activities, simulations, and multiple virtual experiences. Social and collaborative learning in virtual environments, infuse active engagement and interaction, using social context, group learning-problem solving processes, and performance reflections-evaluations (Li, Dong, & Huang, 2009). Intelligent design contributes elements of selective features, suitability, practicality, and immediate access.

Virtual learning in a Learning Content Management System (LCMS), using intelligent design models, facilitates multidimensional thinking, engagement, and problem solving; virtual learning-working occurs at any given time, in the global world. New tools are being designed and prototyped, which enable unlimited populations to work and learn through innovative ubiquitous technology. E-learning and knowledge management are incorporated in the collaborative context of virtual learning design, with ambient object repositories incorporated in the contextualized, personalized system for reusable and integrated use (Barbosa, D., Barbosa, J. Hahn, & Saccol, 2011; Yang, 2006). Characteristics of noteworthy instructional design for virtual learning include: (a) permanent learning features with tracking and recording, (b) access to multitudinous

content, (c) learning content is self-directed and immediately accessible, (d) provides connection with expert, instructional, and learner support and collaboration, and (e) integrates engaging activity and provides authentic application (Zamfir, 2009; Zamfir, 2012).

Research in the area of collaboration in virtual teaching and learning pedagogy, is emerging as a rapidly growing interest area for instructional planners, designers, educators, and organizational learning-working leaders. The consideration and inclusion of collaboration in teaching and learning-working within the virtual platform, has yielded significant benefits, based on the aforementioned literature review. As research continues to evolve, through the use of innovative ambient technologies, the traditional role of a teacher as the source of information will transform into the role of a co-explorer, promoter, facilitator, and guide; students will champion the learning process.

Conceptual Framework and Key Variables/Concepts

When using classic grounded theory as a research design, the researcher must take every precaution to minimize any preconception, ultimately minimizing the potential for bias (Simmons, 2009). Grounded theory begins with a topic of interest or concern and becomes conceptualized through the process of constant comparative analysis (Roderick, 2010; Simmons, 2008). Following the data collection and constant comparative analysis, core variables will begin to emerge and guide the literature review process. This suspension of a literature review forces the researcher to view the literature through the lens of the data, rather than submitting to the temptation of preconception through an initial literature review resulting in a conceptual framework for the study (Glaser, 2003).

Summary and Conclusions

The presented literature review affirms the gap in research that explores the perceptions of individuals who lead virtual organizations relative to elements of effective leadership processes within virtual environments. The initial literature review establishes the need for research, which will result in an emergent theory.

During the last several years, research on leadership has focused on traits, attitudes, and behaviors. Technology advances and development impact the phenomenon of leadership and the virtual context of processes and systems that influence leaders' effectiveness. Given the exponential growth in technology advances, research on virtual leadership, virtual leadership training, and program considerations deserves focused attention. This grounded theory study holds substantive impact and implications:

- Virtual leadership is becoming attractive and research using virtual context is a sought after demand
- Financial and training variables for new virtual leaders can be effectively explored
- Through the identification of a theory grounded in data, a core category with an integrated set of hypotheses within the topic of virtual leadership will contribute to the body of knowledge regarding the core category
- Further exploration and inquiry into targeted aspects of virtual leadership will enable researchers to transcend traditional leadership categories

Grounded theory incorporates the literature review as related to the emergent theory (Glaser, 2011). In Chapter 3 I describe the design and rationale of my chosen grounded theory study on virtual leadership.

Chapter 3: Research Method

The purpose of this grounded theory (GT) study was to discover an explanatory theory derived from data, which facilitated an understanding of effective virtual leadership systems and processes. In this study, I pursued an exploration of virtual leadership leading to an emergent patterned core dimension or facet that informs practice and advances the phenomenon of virtual leadership. In this chapter, I describe the chosen research design and rationale for such, define and explain my role as an observer-researcher, reflect on the management of researcher bias, and describe the methodology used in the study.

Research Design and Rationale

The following research questions framed this grounded theory study:

- What theory explains the effectiveness of a leader in his or her role within a virtual organization?
- What are key elements of effective leadership systems and processes in the virtual organization?
- What is the role of collaboration (if any) in virtual leadership?
- What specific interaction issues and systemic conditions influence the virtual leader's strategies?
- How do leaders of virtual organizations perceive the qualities of effective leadership skills for virtual organizations?

- What is the role of technology in communication, collaboration, problem solving/decision making, and effective leadership processes within the virtual leadership system?

The central phenomenon of this study was the perceptions of individuals who lead virtual organizations relative to elements of effective leadership processes and systems within virtual environments. *Virtual leadership* has been defined as leading in an environment that is other than physical (Williams, 2002). Technology has changed the way individuals communicate, collaborate, problem solve, lead, and manage virtual organizations. Virtual leadership is impacting a paradigm shift in the way leaders and followers perform the aforementioned functions within and among organizations.

The current study was implemented using classic grounded theory (CGT) (Charmaz, 2006; Glaser, 1978, 1998, 2001, 2003, 2005, 2009, 2011; Glaser & Strauss, 1967; Martin & Gynnild, 2011; Morse et al., 2009). Grounded theory is a research method that results in the generation of a theory directly from data; the method is notable for its use of rigorous constant comparative analysis, resulting in the conceptual integration of core and related/integrated concepts, producing a hypothesis that explains the relationship between concepts or patterns of social behavior and forms the basis of a theory (Glaser, 1998; Holten, 2011). Using constant comparison as a method for analyzing data in a substantive area, grounded theory produces theory that can explain and hold meaningful relevance to a social phenomenon for scholars, students, and laymen (Glaser & Strauss, 1967, p. 3). Conceptual categories are generated from data and facilitate the theoretical framing of a social phenomenon Theoretical categories will not

change, while the individual data sets may change within a substantive area (Glaser, 1998).

Methodological stages for conducting grounded theory research include the following: (a) identifying the substantive area and minimizing preconceptions regarding such, (b) collecting data, (c) open coding data as it is collected, (d) writing memos throughout the research process, (e) conducting selective coding and theoretical sampling, (f) sorting written memos and finding best-fit theoretical codes, (g) reviewing relevant literature and integrating it with the substantive theory through selective coding, and (h) writing up the theory (Glaser, 1978, 1998). The researcher may revisit the stages as needed during the process of theory development.

Identifying Substantive Area and Minimizing Preconceptions

My substantive area of study is effective virtual leadership systems and processes. *Work systems* might include partnerships, collaborations, and suppliers, while *work process* refers to key work processes internal to the organization. The study was framed around the perspectives of virtual leaders holding such positions in successful and innovative virtual organizations. Elements of success and innovation for a virtual organization include the following:

- Ubiquitous capacity to respond to change
- Capacity to satisfy separate but simultaneous objectives through resource optimization
- Goal metamanagement using reflection
- Mindful decision making at serendipitous opportunities (change agentry)

- Culture of innovation and risk-taking
- Strong leadership
- Inimitability
- Alliance formation with maximized information technology (IT) infusion supporting knowledge workers and business processes
- Effective stewardship of expertise and intellectual capital (Gregor, Wassenaar, & Marshall, 2002; Lin & Lu, 2005; Marshall, McKay, & Young, 2007, p. 226; Mowshowitz, 1994, p. 267; Mowshowitz, 2002; Riemer & Klein, 2007).

Doing grounded theory presupposes that the researcher will take measures to avoid preconceiving what he or she will discover in the data, including the use of preconceived concepts and categories for coding (Glaser, 2011, p. 23). Unlike other traditions, grounded theory does not frame the study with a preliminary review of literature in which a theoretical or conceptual framework supports or preconceives the study. Stated dicta for grounded theory demand that the researcher postpone the literature review in the targeted substantive area and related areas of the research until the sorting and writing-up phase inherent in classic grounded theory, as noted in the last section of Chapter 2. At this juncture, the review of literature may facilitate further constant comparison of data and keep the researcher free from the tendency to "get grabbed" by concepts and indicators that skew the study (Glaser, 1998, p. 67). Glaser (1998) cited six reasons to delay the preresearch literature review:

1. The researcher can become biased with concepts that may or may not be relevant to the study; elements of the study can be derailed.
2. The researcher can acquire a perceived *professional* problem that interrupts the focus of the substantive area under study.
3. The researcher may begin to acquire selected interpretations and connections that can skew his or her capacity to remain unbiased and allow the interpretations to emerge from the collected data. Speculation has no place in grounded theory when *unforced* data provide the interpretation.
4. The researcher may lose confidence in the quest to discover a theory when other literature sources detract from this quest.
5. Theoretical sensitivity may become weakened as the researcher speaks the jargon inherent in the literature review.
6. The literature relevant to the study will not be known until the main concern within the core category emerges through constant comparison. To this end, the relevant literature will provide targeted contribution to the theory grounded in the data.

In grounded theory, the researcher minimizes preconceptions with an understanding of personal and professional experiences that may skew the data collection process while thinking abstractly about the substantive topic as behavioral patterns emerge (Glaser, 1998). I used the resulting grounded theory to organize the framework of the literature review.

Rationale for Choosing Classic Grounded Theory

The field of virtual learning and leadership research is an emergent discipline. Research that illumines the organizational leader-learner's understanding of effective elements in leadership through technology is paramount to future design of virtual learning environments and virtual organizational structures. Grounded theory is a method that facilitates understanding and explanation, especially when little or no research has been done resulting in a theoretical framework; it is a comprehensive research design that holds value and applicability to any situation (Glaser, 1998, p. 45).

Grounded theory is inductive, developmental, and represents views of the participants relative to a substantive area of interest and results in a systematic set of conceptual hypotheses from data; the resulting substantive theory is action oriented and provides a conceptual framework to create systemic change centered on a substantive area (Glaser, 1992, p. 15). Grounded theory is the natural fit that meets the goal of my study, to discover an explanatory theory directly from data that facilitates an understanding of effectual virtual leadership systems and processes.

Grounded theory originated with Glaser and Strauss (1967) and has been adapted and modified in various disciplines to fit specific knowledge areas and interests. While there are many remodeled versions of classic grounded theory, three general versions are typically chosen (Morse, Stern, Corbin, Bowers, & Clark, 2009):

1. Glaser (1978, 1992, 1998, 2001, 2003, 2005, 2009, 2011, 2012)
2. Corbin and Strauss (2008)
3. Charmaz (2006)

While Corbin and Strauss would agree that grounded theory facilitates the transition from a description of what is happening to an understanding of the process by which it is happening, one significant difference is the belief regarding the explication of the data analysis process. Glaser (1992, p. 5) asserted that Strauss was promoting a new method, termed "forced, full, conceptual description." Glaser further maintained that the remodeled version was no longer grounded theory, but another method "using intricate detail about specific research techniques and procedures" (McCallin, 2009, para. 6). Using this structured analysis method and specific techniques can give the researcher a systematic guided process to follow, but risks the potential to have an outcome that provides a theory that explains what is meaningful to the study participants.

While researchers using the classic grounded theory design must demonstrate inductive-deductive thinking, simultaneously integrating the processes of constant comparative analysis and hypothesizing, Strauss and Corbin are considered grounded theorists who gravitate toward concrete thinking and use grounded theory beyond the generation of theory, using techniques to produce meaningful descriptions (McCallin, 2009; Morse et al., 2009). Glaser maintained that classic grounded theory placed focus on induction and theory emergence; Strauss wrote "…generation of theory through comparative analysis both subsumes and assumes verification and accurate description, but only to the extent that the latter are in the services of generation" (2008, p. 28). Straussian grounded theory aims to produce theory that fits, holds situational relevance, and holds meaningful application to practice (Corbin & Strauss, 2008).

Charmaz described grounded theory as a set of guidelines that provide the framework and approach to discover a theory (Charmaz, 2006, p. 9). She promoted the adoption and adaptation of the guidelines in order to fit diverse research needs, approaches, and assumptions; "My approach explicitly assumes that any theoretical rendering offers an interpretive portrayal of the studied world, not an exact picture of it" (Charmaz, 2006, p. 10). Since the topic of virtual leadership is an emergent topic of study, the classic grounded theory design will ground the theory development directly from the perceptions of participants, rather than a preconceived framework.

For this research effort, I considered other methodologies that seemed to be informed options, however, following initial investigations and training in the method(s), I concluded that each would not meet my stated goal. I wanted to use a method that was framed in the views of participants' perceived lived experiences and provided rigor in the data analysis. I discovered Q Methodology as a method for a study of human subjectivity holding statistical merit. Q methodology was introduced by William Stephenson in 1935 and further defined as a technique in 1953 (Stephenson, 1953).

Generally, Q methodology uses small numbers of participants/respondents for in-depth examination of a single case using rigor and statistical formulae. Subjectivity includes an individual's communication about his or her point of view with an individual point of reference (McKeown & Thomas, 1988, p. 12). In this methodology a person is presented with a set of statements about a selected topic and is asked to rank-order the statements in a range from agree to disagree; this process is called *Q Sorting*. The statements are not fact and are not the statements of the respondent; however, the ranking

of the statements brings about the individual point of view or subjectivity. The rankings are factor analyzed resulting in selected subjective factors and the ultimate focus of Q Methodology lies in the nature of the segments of subjectivity and the degree if similarity or dissimilarity (Brown, 1993, p. 94).

Q Methodology is used when the focus is on quality; however, the procedures use rigorous statistical techniques. The essence of Q Methodology that appealed to my interest included the potential to show statistical significance with a subjective self-reference. It looks at many individual viewpoints about a topic and narrows them down to a few factors that represent the shared view. Q Methodology provides a way to understand and describe a variety of individual viewpoints on a topic. As my understanding increased with this method, I began to realize that the goal of my study could only be accomplished through a method that would use actual experiences from the participants and result in a theory grounded in the data of such. Unlike evidenced-based practices/methods such as Q Methodology, which operate at a descriptive level, classical grounded theory uses specific procedures leading to analysis at a conceptual level; it compares data for conceptualization (Glaser, 2009).

For this research study I also considered using a phenomenological approach, which uses lived experiences of the participants. In a phenomenological approach, the following is present:

- A critical need to explore and understand individuals' shared or common experiences regarding the phenomenon

- Several participants who are able to reflect on their experiences and perceptions about the topic
- Selected questions presuppose interviews or multiple interviews with the participants
- Questions address the perceived experiences and situations or contexts that have influenced or affected the participant's perceptions about the topic (Creswell, 2007).

Since my intent is to discover an explanatory theory directly from data that facilitates an understanding of effectual virtual leadership systems and processes, a phenomenological approach would not fit the stated purpose.

A case study approach was considered as another meaningful approach, due to the rich data collected through observation. The case study approach facilitates the collection of multiple sources of data, including observations, interviews, documents, video-audio genre, etc. Selected participants within the targeted setting represent the phenomenon through contributions of meaningful artifacts. To this end, the case study provides the authentic context for the phenomenon to be studied (Yin, 2011). While the aforementioned methodologies provide valuable exploratory data, none provide the means to discovering a theory that is grounded in data; virtual leadership has not been researched relative to systems and process that contribute to effectiveness and successful virtual leadership.

Role of the Researcher

I am a virtual leader in a large online learning environment serving approximately 16,000 students (K-12). The participants of this study had no professional relationship with me and none were employed in the same organization. The nature of my chosen research design and methodology using grounded theory minimized any bias that I may have held relative to the identified research questions for this study. I used e-mail, Skype, and phone to contact initial participants and included required protocol information, ensuring understanding and clarity regarding the nature of this study and reason for their selection as a participant.

My role as the researcher of this classic grounded theory study was to: (a) conduct interviews, collect, and code data; (b) manage data analysis through constant comparison methods; (c) perform best-practice selective coding as outlined in this chapter; (d) sort written memos and find best-fit theoretical codes; (e) review, evaluate, and integrate relevant literature with the substantive theory through selective coding; and (f) write up the theory that is grounded in the data (Glaser, 1978, 1998).

Methodology

This section describes the participant pool, data collection methods and considerations, and measures for ethical protection with participants.

Criteria for Selecting Participants

Patton (2002, p. 244) suggested that the size of the sample in qualitative research is connected to the following: (a) the purpose of the inquiry, (b) what is useful, (c) what

you want to know, (d) what will provide credibility, and (e) what can be done with resources that are available.

> The total number of participants in a Grounded Theory study cannot be known in advance. It is determined by theoretical saturation, which occurs when data analysis no longer yield new variations, concepts, or categories. This can be vastly different with each individual piece of research… following initial data collection and analysis, participants will be selected according to theoretical sampling, so other than the initial location, there is no way to know locations and organizations in advance. (Simmons, 2009, para. 7-8)

I interviewed and used memoing in conjunction with Voice-over-Internet Protocol (VoIP) with 77 leaders of virtual organizations. I made purposeful connections with many such individuals who are known through action research in the area of virtual leadership with a colleague in New Zealand, virtual leaders in the United States who have demonstrated innovations in virtual learning organizations through the International Association for K-12 Online Learning (iNACOL), and virtual leaders representing transformational companies/organizations affiliated with knowledge information and learning. Initial contact was made through e-mail followed by VoIP, setting exact time and duration of the first interview. I conducted most of the interviews virtually and asynchronously. Informed consent procedures were followed using the Consent Form for Adults. Subsequent participants were selected entirely through theoretical sampling and through referral by other participants; selection criteria were contingent upon the emerging theory and could not be predetermined (Simmons, 2009, para. 10). Further,

participants were selected based on their relevance to the emerging theory. Data collection included interview data to construct analytic codes and categories, use of constant comparison, and simultaneous efforts through all stages of data analysis. Additionally, extant data sources were used, such as virtual group discussion data, articles submitted to virtual working groups, and related interview data.

Participants contributed data in the form of journals, logs, letters, historical records, and answers to written questions, in addition to the interview questions, as warranted. These elicited textual materials contained feelings, perceptions, and thoughts regarding the phenomenon of virtual leadership. Textual material I obtained included selected organizational documents, such as: (a) documents/policies, (b) correspondence, (c) Internet discussions, (d) recorded VoIP sessions, and (e) mass media communications. Note taking during the interview facilitated further formulation of meaningful questions for emergent themes, in-depth analysis of themes, and served as a back-up for possible technology problems with recording devices. There were no intervention/treatment activities involved in this study. Data collection ceased when the analysis was complete. Exclusionary issues were not applicable in this study. Appendix A includes a sample of the Consent to Interview form. Appendix B includes the Interview Protocol used for this study.

Collecting Data

Defining components of grounded theory, according to Glaser (1992) include the following:

- Using data to construct analytic codes and categories

- Simultaneous efforts in data collection and data analysis
- Using constant comparison through all stages of data analysis

He further identified essential grounded theory practices include memo writing and sampling, focused at theory construction. To this end the literature review was conducted after the data analysis was developed (Glaser, 2011; Martin & Gynnild, 2011; Simmons, 2009). According to Glaser (1998, p. 8), a basic tenet of grounded theory is that "all is data," meaning that written words in magazines, books, documents, observations, biases of self and others, interviews, pictures, etc., may be used as data for constant comparison using grounded theory.

Intensive interviewing. Intensive interviewing has traditionally been considered a valuable data collection method in qualitative studies, providing in-depth exploration of a phenomenon directly with an individual who is able to describe and reflect on their perspective and personal interpretation of the experience (Charmaz, 2006, p. 25). The interview protocol was constructed using a small number of open-ended questions, which create opportunity for rich discussion and storytelling centered on the phenomenon. According to Charmaz (2006) the intensive interview may be conversational; however, the role of the researcher is to strategically probe and encourage through clarifying techniques, resulting in the acquisition of deep, descriptive, and accurate information about the participants' experiences, intentions, perceptions, and meanings. This type of interviewing facilitated the following:

- The interviewer may go beneath the surface of the described experience(s)
- Statements and topics may be explored at any time in the interview

- The participants' humanity, perspective, and actions may be validated
- Observational and social skills can be used to deepen the discussion
- The participant may share significant perceptions and become the expert (Charmaz, 2006, p. 26).

Intensive interviewing facilitated my research through methods that are "open-ended but directed, shaped yet emergent, and paced yet flexible" (Charmaz, 2006, p. 28). Glaser (1998) addressed the *grand tour question* as an invitation to start with an open ended question, followed by the researcher's capacity to speak little and extend probes that are limited to what has been spoken. The participant was able to fully illuminate the substantive topic. The aim of the intensive interview was to create the climate for the interviewee to direct the course in identifying the main concern and subsequent substantive focused categories (Glaser, 1992, p. 25).

Special consideration was taken when constructing the interview questions so that sufficient detail could be provided to the institutional review board (IRB) to demonstrate safety of the participant. Care was taken to provide sufficient detail and yet provide open-ended questions that provided opportunity for material to emerge throughout the interview process (Charmaz, 2006; Creswell, 2007). Patton (2002) suggested using informed consent protocols and opening statements in the interviews covering the following questions:

1. What is the purpose of this data collection?
2. How will the information be used?
3. What is the content of the questions?

4. How will confidentiality be upheld?

5. What are the risks and benefits of the participant?

> Grounded theory focuses on patterns of behavior, not individual people. As such, the only purpose for identifying individual data sources was for contact purposes in case of a needed follow-up interview. Once this need passed there was no need to associate names with interviews. Interviewees were identified with a numeral (P1, P2, P3, etc.). In the grounded theory write-up short quotes from the data (interview or field notes) were used to illustrate a concept. Individuals or any type of identifying information were not connected to quotes. (Simmons, 2009, para. 13)

All field notes and interview transcripts were kept in a secure location, accessible only to the researcher. A back-up system for record keeping and data storage was incorporated into the study.

Elicited texts. Participants contributed data in the form of personal diaries, logs, letters, historical records, and answers to written questions. These elicited textual materials contained feelings, perceptions, and thoughts regarding the phenomenon. Many participants were more comfortable sharing their personal stories in writing rather than through the interview process (Charmaz, 2006). Many chose to contribute in writing due to the time constraints of scheduling virtual or phone interviews. One disadvantage to using elicited text alone is that once the response is captured, the researcher is not able to revise or ask a further probing question. Given this knowledge, I was able to have follow-up phone conversations with selected participants. My desire was to gain

sufficient entry and access agreements in order to have the flexibility of conducting a follow-up contact after the textual materials are collected. Follow up interviews facilitated the process of constant comparison. Only four interviewees indicated they were unable to provide follow-up data. I was able to see if the data support emerging categories in order to further emerging categories by framing their properties and dimensions (Holten, 2011).

Extant texts. Text material that I planned to obtain for my research study in virtual leadership included selected organizational documents (policies), correspondence, Internet discussions, recorded Voice over Internet Protocol (VoIP) sessions, and mass media communications. Charmaz stated that extant text material augments interview methods and can provide valuable data when the following questions are incorporated into the research plan:

1. What are the perimeters of the data?
2. What information has been omitted?
3. What does the information mean to the participants?
4. How, if at all, does the information affect actions or processes?
5. Who is the intended audience for the information?
6. Who benefits from the interpretation in and in what selected manner?
7. When and how do telling points emerge in the text?
8. What kinds of comparisons can be made? (Charmaz, 2006, p. 37).

Recording data. I captured actual verbiage of interviews, through digital recording mechanisms and Voice over Internet Protocol (VoIP). Recording devices

assured accuracy and allowed the interviewer to be more attentive to the participant, resulting in the intuitive interchange within the question flow (Patton, 2002). Note taking during the interview facilitated further formulation of meaningful questions for emergent themes, in-depth analysis of themes, and served as a back-up for possible technology problems with recording devices. Patton (2002) listed the following suggestions for interview recording:

- ensure back-up resources are available such as batteries, microphones, and cassettes (if used);
- test recording equipment before the interview;
- select interview location that is suitable for selected equipment; and
- properly label the recording tapes to ensure accurate transcription.

Conversely, Glaser (1998, p. 107) strongly advised that the researcher "*NOT TAPE INTERVIEWS,"* as a solo researcher doing grounded theory. Glaser further elaborated on taping:

- taping omits the researcher's capacity to mix field notes with interviews, interchangeably; taping collects everything without discrimination, preventing delimitation that leads to saturation;
- taping stalls theoretical sampling;
- the inordinate and unnecessary data may thwart the researcher's capacity to conceptualize, constantly compare data, and theoretically sample, avoiding the tendency to conjecture and lose capacity to determine the need to pursue further data collection in specific categories;

- the researcher needs to infuse observation with interviewing in order to ground in meaning for constant comparison; and
- taping can be seen as producing the verbatim, accurate data for verification of the descriptions, however, this is not the purpose and goal of grounded theory (Glaser, 1998, pp. 108-113).

My goal was to follow classic grounded theory methodology; however, I recorded the first number of interviews following procedures for permission from participants. Most interviewees responded to the questions electronically. As I developed my skills in coding and memoing I was able to effectively notate and memo conceptually, not descriptively. I kept notes on what worked and what did not as a means of documenting my in-process measures and improvements based on the analysis of those measures. These notes were facilitative as I drafted Chapter 4.

Coding Strategies

Creswell (2007) identified three essential phases of coding for grounded theory design. Open coding makes initial connections with categories, axial coding builds dimension from categories and properties of categories, resulting in a productive context for *story building* (Creswell, 2007, p. 161), and selective coding facilitates theoretical formation. Anselm Strauss and Juliet Corbin used axial coding as a defining element of their coding paradigm, resulting in a process of constructing data relationships between and within categories. The researcher would identify condition types for categories, such as context, intervening, structural, or causal (Strauss & Corbin, 1998). While axial coding is a direct way of analyzing data, classic grounded theory does not incorporate

any method that would add elements of preconception or forced data generation (Glaser, 2012, 2013). Patton (2002, p. 491) referred to the open coding phase as conceptual ordering where the researcher moves from lower-level concepts to higher-level theorizing.

Charmaz (2006) and Saldana (2011) identified numerous types and levels of coding:

- open (Initial) coding: the initial step connecting data to categories using words that reflect action;
- word-by-word coding: this coding forces the examination of images and meanings and is often suggested for Internet data;
- line-by-line coding: this is often the first level of coding and spurs ideas that are hidden when viewing sentences for thematic purposes; and
- incident-to-incident coding: this is noted as a 'close cousin' to line-by-line coding where each separate incident is coded, noting emerging properties using context and behavioristic descriptions.

Open coding. Glaser (1998, p. 140) suggested that the researcher begin by comparing line by line incidents while constantly asking the questions:

1. What category does this incident indicate?
2. What property of what category does this incident indicate?
3. What is the participant's main concern?

Open coding was used to generate concepts (e.g. collaboration) and properties of concepts (e.g., tenets of collaboration). Each noted incident indicating a concept or

property of a concept became an indicator for that concept or category. Glaser (1998, p. 140) further suggested that through the constant comparison of concepts and properties the researcher could generate the meaning of the category or property and through meaning making, validate the fit in naming the category or property. Constant comparative analysis occurs when the researcher compares incident to incident when coding using the above questions as the framework; data is related to ideas, which relate to other ideas, creating a pattern where a fitting concept emerges (Glaser, 1998, p. 25). As the constant comparison process continued throughout the coding, analysis, and subsequent theoretical sampling, the "substantive codes may relate to each other as hypotheses to be integrated into the theory" (Glaser, 1978, p. 2). Constant comparison occurred continually as data was reviewed and facilitated my capacity to design, integrate, redesign, and reintegrate theoretical ideas, properties, and hypotheses (Glaser, 2011, p. 128). The result of using the constant comparative method was the achievement of a complex theory, which directly connected to the data and represents an inductive method of theory development.

Focused coding. Focused coding means using the most significant and/or frequent earlier codes to sift through large amounts of data and requires decisions about which initial codes make the most analytic sense to categorize data incisively and completely (Charmaz, 2006, p. 57). Focused coding is considered the second major phase of the coding process and holds greater capacity for selection and conceptualization (Glaser, 1992). Focused codes are created by comparing data to data, followed by the comparison of data to codes, refining and identifying *moments* as they emerge. Coding

capacity relies on the data collected and can only be as rich as the transcribed interviews and notes. The aim of grounded theory is that the researcher is able to accurately capture the perceptions and views of the participant's actions and experiences (Glaser, 2011).

Theoretical coding. Glaser (1992) introduced theoretical coding as a framework to relate substantive codes as a mechanism to specify relationships between and among categories, suggesting a theoretical direction. Theoretical codes can enhance the capacity to produce effective analysis. Glaser (1992) presented several theoretical coding families indicating selected categories with merged distinctions in distinctive concepts. Such categories include cause, context, contingencies, consequences, strategy, dimension, ordering, culture, and others. At this juncture the interview questions can become focused to the concepts grounded in the data and constant comparison of incident after incident continues until there is an emerging pattern and related categories become *saturated*. Saturation is evident when data no longer produces new categories and coded incidents simply add further indicators of established properties (Scott, 2007, p. 12).

Memoing

Memos are a critical component of grounded theory research design and are the "*theorizing write-up* of ideas about substantive codes and their theoretically coded relationships as they emerge during coding, collecting and analyzing data and during memoing" (Glaser, 1998, p. 177). Memoing is founded in the constant comparison process and guided the formulation of meaning and ideas for my study. Glaser used the term *moment capture* to define a critical element of memoing (1998, p. 178).

There is no specific direction on criteria for an effective memo, except that it must "capture the meaning of conceptualized ideas, where they go theoretically and for theoretical sampling" (Glaser, 1998, p. 178). Classic grounded theory is premised on memo capture, sorting with a theoretical frame, and writing up; memos can range from small notations to several pages, depending on the nature of the conceptualized idea or concept (Glaser, 2012).

Sorting and Theoretical Coding

Theoretical coding is a process resulting in the identification of theoretical codes, which "conceptualize how the substantive codes will relate to each other as a modeled, interrelated, multivariate set of hypotheses in accounting for resolving the main concern" (Glaser, 2005, p. 11). Theoretical codes are emergent and assist in developing a model for meaningful theory generation. To this end, substantive codes identify latent patterns of a core category and theoretical codes are used as a framework or model for theory generation. Glaser (1998, 2005, 2009, 2011, 2012) cautioned the grounded theory researcher to assure understanding of theoretical codes, to consciously incorporate theoretical codes into every study, and build a deep repertoire of theoretical codes. Without the infusion of theoretical codes the researcher is limited to incident describing rather than incorporating theoretical relationships within and among the substantive category, including related processes and concepts.

Memo sorting is a process that emerges as the researcher develops his or her bank of theoretical memos containing saturated categories and corresponding properties (Glaser, 2012). The researcher can begin to write-up the first draft of his or her grounded

study with the intended outcome of getting the generated theory on paper (Glaser, 2012, p. 57). A theoretical outline emerges and frames the write-up. The following guidelines are essential to effective memo sorting (Glaser, 2012 pp. 42-55):

- do not preconceive any theoretical outline or use a pre-developed guide; an outline should emerge from sorts that show relationships among and between concepts;
- balance the fit of emergent relationships between and among conceptual categories and associated properties;
- remain fixed and focused at the conceptual level where theoretical codes can emerge and satisfy the elements of a substantive theory;
- target all sorting around the core category and avoid concepts and properties that do not directly relate;
- choose the core category with the greatest level of related concepts; sort for progressive build that contributes to a complex theory;
- stop sorting when theoretical completeness has been realized using least number of concepts with fit; and
- know the therapeutic time to write-up and act swiftly.

Writing-Up

Following successful completion of the theoretical sorting process, the first draft of the substantive theory can be *written-up*. Glaser (2012) suggested that the researcher focus on writing conceptually using minimal descriptions and illustrations of data; "Write abstract of substantive people, place, and time...write in the present tense as the theory

abstraction is alive and happening *NOW*, not just when the data was collected" (Glaser, 2012, p. 60). Classic grounded theory supports the notion of *grab* at the conceptual level rather than a descriptive level; the substantive theory builds credibility with greater levels of applicability and connection with conceptual framing and explanation of how the phenomenon is resolved or managed. Glaser (1998, p. 202) asserted "in the end the reader will remember the concepts (the ideational grab) not the data, so they must be pronounced".

Data Management

Qualitative data are compendious and unruly if not managed. The process of data analysis is dynamic, intuitive, creative, and requires inductive reasoning (Basit, 2003, p. 143). Coding is a critical aspect of data analysis; however, unlike the analysis process, which must be done manually, electronic tools for coding data have been available for several years. Software programs can assist the researcher in their task of analyzing data, but they cannot analyze the data for the researcher (Leech & Onwuegbuzie, 2007, p. 557). I was the primary tool for data analysis and evaluated the advantages of using a software program for managing and analyzing textual data through the coding process. Software developed specifically for qualitative data facilitates effective and efficient data management. Edhlund (2008) identified key advantages to NVivo, a software program for qualitative data management:

- organization of data for ease of retrieval,
- order and structure to comprehensive material,
- accuracy in analysis,

- documentation facilitates theoretical emergence and verification,
- visual representations of ideas and connections, and
- intuitive and user friendly interface.

QSR International, developer company for NVivo software provides the software for managing qualitative data. The company asserts the following (QSR International, NVivo 8): (a) NVivo permits the research to access, organize, and analyze unstructured information in material such as documents, pictures, audio, video, spreadsheets and dataset tables; and (b) NVivo 8 does not do the thinking for you; its powerful workspace helps you to explore your information, so you can make new discoveries and ultimately, better decisions. The coding process can progress and transform in NVivo, through the multiple tools that are *method-free* and yet, support numerous methodological choices.

Disadvantages to software programs for qualitative research include the following (Basit, 2003; Bazeley, 2007; Charmaz, 2006):

- learning new software programs can be intimidating and time consuming,
- smaller projects with little or no need for features that handle visual data and complex Boolean searches across text-based categories may not be appropriate,
- novice users can skew data without knowing the damage done to maintaining objectivity in determining next steps in constant comparison and theoretical sampling,
- comprehensive software programs are costly,
- translation reporting issues if used in other languages, and

- perceived fears that computers mechanize analysis and distance the researcher from their data.

Bazeley (2010) encouraged experimentation with software in conjunction with a posture of resolve to make the program do what you want it to do.

NVivo. QSR International, the developers of NVivo, have provided qualitative researchers with tools to manage data, ideas, query data, graphically model cases, and generate reports reflecting nearly all phases of the research. The expansion of technology into data collection and data management has been notable in the range and types of research now being completed (Bazeley, 2010). NVivo software allows for extreme comparisons in order to explore deep significance of words used and to categorize properties and dimensions within the grounded theory method. Further contributions of NVivo in grounded theory include (Bazeley, 2010):

- uses case memos to move from the descriptive level to the conceptual level;
- presents axial coding that integrates elements from the coding paradigm assisting beyond the description level into a theoretical framework;
- matrix coding queries can be generated to analyze within-case comparisons or to look for within-case associations of nodes; and
- matrix queries check associations between actions, issues, and possible responses to the selected issues, facilitating a valuable role in theory building and theory testing processes.

NVivo is an effective research tool that provides flexibility in qualitative data analysis. I investigated the merits of this product to begin using the memo-writing and

journaling features from the start of my research study, however it was determined that manual techniques were of greater value in my classic grounded theory study rather than software tools, for coding, constant comparison analysis, identification of core category/relevant indicators and properties, and the systematic generation of a substantive theory from data.

General purpose software tools. Microsoft Word (Microsoft Office Word, 2014) has been used to provide features essential in text analysis using features that do not require programming skill. Using macro language inherent in the Microsoft Word was also an option for automating coded passages, handling large numbers of codes, and references from codes to text. LaPelle (2004, pp. 4-17) described seven steps for using Microsoft Word for coding and retrieval of qualitative data:

1. Format interview data into tables,
2. Develop a theme codebook,
3. Add columns and codes to capture face-sheet data,
4. Code text rows with one or with multiple theme codes,
5. Sort data tables and find patterns,
6. Validate coding with in a data table through constant comparison, and
7. Merge appropriate data tables and validate coding across data tables.

The use of general-purpose software was an option for data management that provided the needed features outlined in my proposal. I used Microsoft OneNote to store and maintain my collected data and facilitate knowledge distribution.

Ethical Procedures

There is nothing in grounded theory that requires or allows deception and no protected populations are targeted for this study. Relative to participant confidentiality and anonymity of participants and data:

> Grounded Theory focuses on patterns of behavior not individual people. As such, the only purpose for identifying individual data sources would be for contact purposes in case of a follow-up interview. Once this need has passed, there is no need to associate names with interviews. Interviewees can be identified with a number. In a Grounded Theory write-up short quotes from the data (e.g., an interview or field notes) may be used to illustrate a concept. Individuals or any type of identifying information are never connected to quotes. (Odis Simmons, 2009, para. 13)

Participants signed an electronic consent form, following Institutional Review Board approval. I functioned as the data keeper for all data used in this study. All field notes and interview transcripts were secured in two different locations, using secure protocol and accessible only to me, the researcher. I will continue to maintain all raw data including interview recordings, spread sheets, documents, observations, pictures, etc., for no less than five years from the completion date of my dissertation, according to the protocol set forth in the Walden University's Institutional Review Board (IRB) requirements ("The Dissertation Guidebook," 2010, p. 10).

Summary

I began Chapter 3 with an introduction to the problem and presented the rationale and descriptive discussion on the choice of using a grounded theory study. My role as a researcher was described and included assurances regarding potential researcher bias. Information regarding participant selection, sample size, and ethical treatment was presented, followed by a detailed description of data collection, management, analysis, and measures used to address ethical procedures including issues of trustworthiness. In Chapter 4 I present the findings from the research study, including data collection, analysis, results, and assurances of ethical strategies stated in Chapter 3.

Chapter 4: Results

The purpose of this grounded theory (GT) study was to discover an explanatory theory, derived from data, which facilitates an understanding of virtual leadership, including aspects of systems and processes. In this study, I pursued an exploration of virtual leadership leading to an emergent-patterned core dimension or facet that will inform practice and advance the phenomenon of virtual leadership. The following research questions framed this grounded theory study:

- What theory explains the effectiveness of a leader in his or her role within a virtual organization?
- What are key elements of effective leadership systems and processes in the virtual organization?
- What is the role of collaboration (if any) in virtual leadership?
- What specific interaction issues and systemic conditions influence the virtual leader's strategies?
- How do leaders of virtual organizations perceive the qualities of effective leadership skills for virtual organizations?
- What is the role of technology in communication, collaboration, problem solving/decision making, and effective leadership processes within the virtual leadership system?

This chapter provides an introduction to the theory of seducing engagement as it developed from analyzing elicited and extant data sources. I describe the demographic characteristics applicable to the study, the process by which the data were collected and

recorded, the systems used for tracking the data, and the process of the emerging understanding with support from relevant literature. A discussion of the conceptual categories, subcategories, properties, dimensions, and structural conditions comprising the theory of seducing engagement is presented in the results section of this chapter. The research questions are addressed throughout the discussion of the theory in conjunction with a discussion of the significance and contribution of the theory to virtual organizations and practitioners. There were no personal or organizational conditions that influenced the participants of this study during the data collection period. Each participant's professional experiences during the study reflected the stated purpose and did not influence the study results.

Data Collection

Seventy-seven interviews in conjunction with multiple extant data reviews were conducted between September 2013 and May 2014. The purposive sampling group included participants from Germany, United Kingdom, New Zealand, Costa Rica, Brazil, Canada, and the United States. Organizational types represented in the study included global banking, higher education, project management companies, corporate and culture branding design, software companies, K-12 education, consulting firms, and information technology (IT) automation and management. Following approval from the Walden University Institutional Review Board (IRB), approval #06-19-13-0152918, I began contact efforts with the initial 20 participants identified in my proposal. Seventeen of the 20 participants were contacted through e-mail; the remaining three were contacted in person and by phone. All participants received the consent to participate form through

electronic means, resulting in an e-mail stating the words "I consent," which conveyed that the participant was agreeing to the terms of the study as described in the consent form. Using the approved interview protocol, data were recorded electronically and through VoIP. In addition to interview responses using the interview protocol, four participants followed up with data in the form of personal reflection logs and letters. Consistent with the data collection plan presented in Chapter 3, I obtained data from organizational documents (minutes of strategic planning meeting), correspondence, Internet discussions, mass media communications, and field notes from a live VoIP session. There were no identified variations in data collection from the plan presented in Chapter 3. One noted obstacle in data collection was that three of the participants were unavailable for follow-up opportunities for approximately 45 days. This delayed my opportunities to purposely connect with individualized referrals, based on selection criteria contingent upon the relevance to the emerging theory.

I followed the classic grounded theory practice of memo writing during every stage of data collection (e.g., memos on codes, memos on emerging categories, memos on the core variable, memos on properties of categories, memos on memos) and using the basic tenet of grounded theory that *all is data* (B. Glaser, personal communication, October 20, 2012, June 20, 2013; Glaser, 1998, p.8), meaning that written words in magazines, books, documents, observations, biases of self and others, interviews, pictures, and so on may be used as data for constant comparison using grounded theory. Figure 1 illustrates the concept of classic grounded theory, including elements of process and product generation. Through selective coding, an additional 57 participants were

interviewed in conjunction with related constant comparative analysis on aforementioned extant data. Participants were encouraged to contact me if they had further reflections or additions to their submitted responses. Several offered participant referrals based on their follow-up reflections on the interview. Responses from the selected referral sources transitioned the data analysis from open coding to selective coding. Electronic copies of the completed interview protocols, coding data, field notes, memos, and theoretical coding outline using general purpose software tools have been saved and stored in Microsoft OneNote, as indicated in Chapter 3. Additionally, I have two backup devices for data safety.

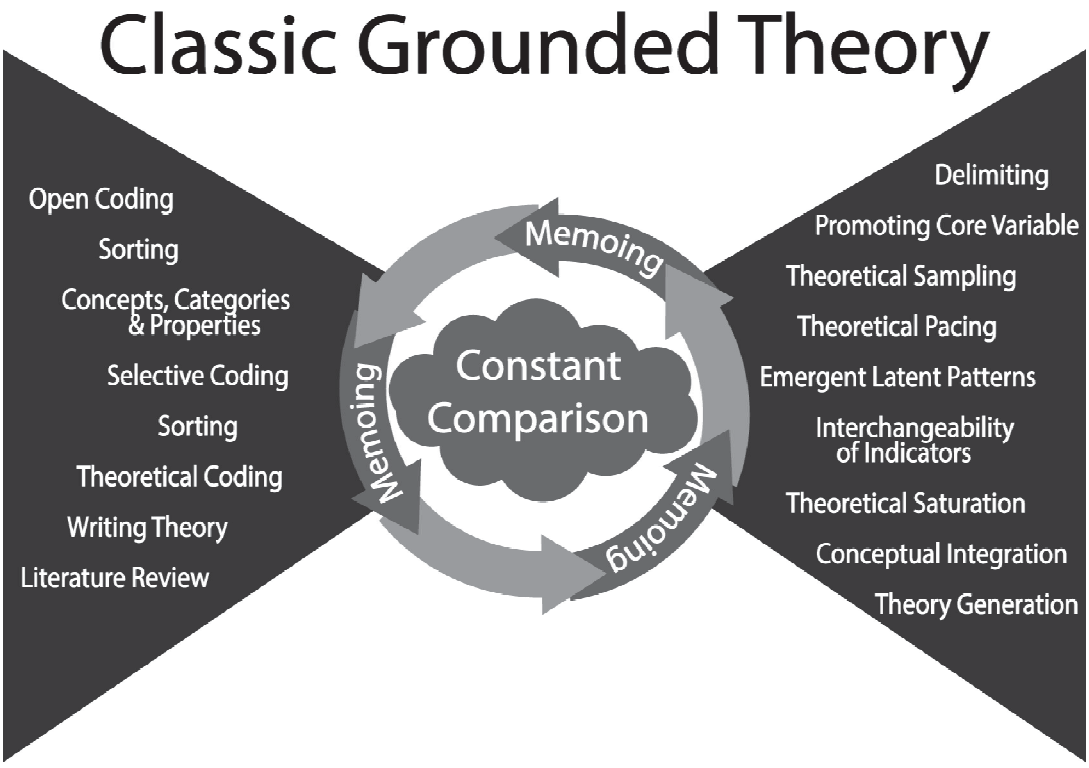

Figure 1. Illustration of classic grounded theory.

Data Analysis

Using the interview protocol, each participant was asked the same *grand-tour question* (Glaser, 1998): "What do you feel about your experience as a virtual leader?" Subsequent questions included the following:

- What are the issues for you when working virtually?
- How did you/do you resolve those issues?
- Visualize and describe what a successful day looks like in virtual working and virtual leading.
- What else should I know that I haven't asked?
- What is your role in the virtual organization?

The completed protocols were coded, resulting in the creation of in initial code bank. In addition to intensive interviewing, elicited texts (participant reflection logs, letters, and answers to written questions), I obtained extant text data consisting of Internet discussions (e.g., groups such as Virtual Manager, The Distance Lens Blog, Virtual Working, Virtual Worlds), correspondence, and mass media communications, supported by the basic tenet of grounded theory that *all is data* (B. Glaser, personal communication, October 20, 2012; Glaser, 1998, p. 8), meaning that written words in magazines, books, documents, observations, biases of self and others, interviews, pictures, and so forth may be used as data for constant comparison using grounded theory. As described in Chapter 3, constant comparative analysis (open coding, selective coding, theoretical coding), followed by memoing and further sorting, resulted in the development of a theoretical outline, and ultimately the theory of seducing engagement.

I followed Glaser's definition of open coding, underlining each incident, while asking the following questions:

- What category does this incident indicate?
- What property of what category does this incident indicate?
- What is the participant's main concern? (Glaser, 1998, p. 140)

The open coding was followed up with memoing on the initial codes (comparing incident to incident). I began to enter the initial incidents and resulting codes in a database, thinking that I could capture greater analysis with the filtering capacity of the database. I quickly realized that using the database for coding and constant comparative analysis was time-consuming and counter-creative to the conceptual ideation imperative for generating effectual grounded theory (Glaser, 2011, p. 151; Glaser, 2013). I needed to have greater flexibility and freedom in maneuvering ideas as they emerged and developed during the constant comparison and memo-making process (Glaser, 2003). Glaser stated, "sorting cannot be accomplished by a computer program.... only the original researcher knows enough of all the conceptual meanings, to properly sort memos" (Glaser, 2014, p. 90). Glaser further warned against computer sorting:

> Computer sorting is not for GT [grounded theory]....all it does [computer sorting] is retrieve all data or memos on a category, with the result of full conceptual description on the category with no theoretical coding and with overload in ideas or data on the category. There is no delimiting for saturation or relevance of memos based on maturity of memos. All are retrieved equally, as if equal. And interrelations become preconceived or forced. (Glaser, 2005, p. 47)

General-purpose software tools were used to create an outline template where I was able to code, inspect, create hierarchies of code categories through indexing, and annotate text/evidence iteratively. Following the open coding of ten to twelve interviews and constant comparative analysis, focused coding became applicable, where incidents were being compared to the emerging codes. Fidelity with classic grounded theory includes ensuring that patterns within data can only be named/identified after seen multiple indicators of the pattern; pattern formation from one or two indicators are not sufficient to begin the naming process (H. Scott, personal communication, March 7, 2014, May 5, 2014; Scott, 2007; Scott as cited in Glaser, 2011, p. 54). I began to see the core variable of seducing engagement emerging after the sixteenth to eighteenth interview. At that time, I coded the core variable *seducing negotiation*. After further selective coding while delimiting coding to variables that related to seducing negotiation, the core variable code name changed to *seducing engagement*. According to Glaser (2014), "naming patterns (concepts), especially the core category and sub-core categories, is a trial and error effort documented in the memos....concepts take on their full meaning, grab of modification by their relationship to each other" (p. 45). Appendix C, titled Initial Coding Categories and Codes, includes a listing of categories and codes from the initial open coding process. Selective coding facilitated the capacity to seek new information from the interviews (through coding data, integrating categories, and memoing) and the process of developing theoretical sensitivity (Glaser, 1978). From the first interview throughout the data collection and analysis process, I memoed thoughts and ideas; "Memos are where the emergent concepts and theoretical ideas are generated and stored when doing GT

analysis....memos potentiate thoughts into categories by stimulating thinking" (Glaser, 2014, p.40). Writing up memos permitted the generation of codes, which became categories, and properties of categories. Through constant comparative analysis and memo generation, a theoretical outline began to form. Appendix D includes a listing of final core category, subcategories, structural conditions, properties, and dimensions of properties. Once the theoretical outline matured, the basis of the findings of this study emerged swiftly. Appendix E includes a sample of a coded interview. Additionally, Appendix F includes memo fund samples.

Glaser (1978) provided an explanation of the relationship between a conceptual code, data, and theory generation:

> The code conceptualizes the underlying pattern of a set of empirical indicators within the data...thus, in generating a theory by developing the hypothetical relationships between conceptual codes (categories and their properties) which have been generated from the data as indicators, we "discover" a grounded theory....there are basically two types of codes to generate: substantive and theoretical... substantive codes conceptualize the empirical substance of the area of research; theoretical codes conceptualize how the substantive codes may relate to each other as hypotheses to be integrated into the theory. (p.55)

Glaser (1978; 1998) provided the structure to generate theory through listing theoretical coding families and stated the following relative to the integrative scope of theoretical codes: "One talks substantively and thinks theoretical of the relationship between codes.... the choice [of the theoretical code] starts determining integrative patterns, which

limits the freedom in further choices" (Glaser, 1978, p. 72). This study falls under the *Strategy Family*, which facilitates theory development that includes strategies, tactics, mechanisms, manipulation, maneuverings, dealing with, handling, techniques, means, goals, arrangements, positioning, and more. According to Glaser, "This family has lots of *grab* [emphasis added] for analysts and readers alike... interaction sociologists especially talk a lot about how people strategy people, however, the structuralists also talk of mechanisms and arrangements that strategy people from the point of view of social organization." (1978, p. 76). In seducing engagement, the virtual leader uses technology as the mechanism to enlighten solutions and cultivate others success using multifaceted content and process strategies.

Evidence of Trustworthiness

Unlike qualitative research, where the general goal includes rich description, the goal of classic grounded theory is to generate a theory that is conceptual, grounded in data that produces patterns of behavior, which is relevant and addresses issues and problems for the purposive sample group (Glaser, 1998 p. 93). The perspective of grounded theory includes both data and theory (Glaser, 1998, p. 3). Regarding external validity, Glaser stated that a well done grounded theory would transcend diverse previous works (theoretical ideas) by integrating them into a new theory of greater scope than those that exist, thus making a useful contribution (Glaser, 1978, p. 10). Grounded theory induces logic from data and applies the logic to the actual data, following emergence of ideas and concepts. Simmons (2009, para. 2) supported that classic grounded theory is movable over time and space, as a result of its conceptual rather than descriptive nature.

Glaser (1998, pp. 236-238) presented four criteria for evaluating evidence of trustworthiness in classic grounded theory:

1. *Fit*, another term for validity that means the degree that the concept represents the pattern of data it purports to denote, and the initial functional requirement of relating theory to data in classical grounded theory. Sometimes concepts do not fit the data; "grounded theory does away with this problem of fit by just going right to the data and generating concepts from it, while constantly adjusting the best word to denote the pattern as constant comparisons occur and the pattern emerges...what fits will emerge as the pattern gets named" (Glaser, 1998, p. 236). This criterion addresses the discrepant case with data that does not *fit*.
2. *Relevance* emerges with fit, and relates to the authentic perceived issues of the participants in the substantive area. In grounded theory, subsequent concepts and modifications through the constant comparison method of data analysis, relate to authentic issues people face and include a theory of how they resolve their problems. According to Glaser (2012, p. 70), "the credibility of the theory resides in its relevance and fit for a conceptual explanation on how a main concern is continually resolved, not by illustration used as if it was proof."
3. *Work*, is the effect of fit and relevance and facilitates the researcher–analyst as he or she "begins to integrate a core category and sub-core category theory that account for most of the variation of behavior in the substantive area...the

concepts and their theoretical coding are tightly related to what is going on" (Glaser, 1998, p. 237). Grounding is manifested in the substantive codes through the sources of work, fit, and relevance (Glaser, 2005, p. 10).

4. *Modifiability* through constant comparative analysis is notable; "the theory does not force the data, the theory gets modified by it... the literature review modifies the theory when appropriate" (Glaser, 1998, p. 237). Subsequent data modifies the theory. To this end, according to the principles of classic grounded theory, there is no such thing as a "wrong" theory.

The aforementioned criteria engender trust, according to Glaser; a theory that demonstrates fit, applicability, and provides an inherent mechanism for modification, is compelling enough to resist data forcing or preconception (Glaser, 1998, p. 237). Validity occurred in this study, through fit relevance, modifiability, and work, in conjunction with the processes of constant comparative analysis, memo generation, and theoretical sampling.

Study Results

Leading virtually is not preferred, but necessary, based on the future direction of our highly interconnected global world (Participant 8, personal conversation, 12-18-13). The main concern identified by nearly 100% of the 77 participants interviewed in this study is the process of *cultivating success* in the virtual worker–learner. Most agree that working, managing, and leading virtually is a second choice, to working face-to-face; however, virtual leading/working is needed to increase business opportunities and connect globally. Today's workplace is anywhere that an employee can work (H. Scott,

personal communication, May 5, 2014). The benefits of virtual working far exceed the obstacles (Busch, Nash, and Bell, 2011, p. 9; Sheridan, 2012, p.13).

The problem is that leaders of virtual environments and organizations (virtual leaders) are responsible for the outcome of the virtual working process and products. To this end, the virtual leader must maximize his or her capacity in multiple contexts, with each worker–learner to ensure virtual worker *engagement*, including understanding, perception/stakeholder buy-in, and effective results for the company. A culture of engagement empowers employees and builds a mindset of loyalty and personal ownership. The return on engagement (ROE) factor is the fiscal impact of engagement levels on an organization. Sheridan (2012, p.71) cited a very strong correlation between engagement and exceptional performance, as measured by employee performance ratings and levels of engagement. Engaged workers assume greater responsibility for work load process and outcome than less engaged workers, resulting in larger amounts of work being accomplished using fewer employees.

The emergent core variable of this classic grounded theory study is *seducing engagement*. Seduction comes in the form of resource gifting or *sourcing gold*, an *in-vivo* code (Participant 7, personal communication, December 23, 2013), communication coaching, relationship building, and exponential effort in cultivating multidimensional commitment of virtual workers to grow the success of an innovative organization. An *in-vivo code* is a term that has conceptual strength/influence and is expressed by a participant during the interview as perceptions of personal experiences are described. Seducing engagement requires the virtual leader to give his or her full attention and

creativity (enlightening solutions) as they [leaders of virtual environments and organizations] become paradigm shifters. Cultivating others success virtually, is a problem perceived by nearly all participants/virtual leaders. To solve this problem, (through active engagement), virtual leaders provide the gold sourcing/resource gifting; they balance their efforts, shifting between process and content gifting. The degree of success for each (process and content) is connected to the degree of technology support within the organization (driving technology as a structural condition), the degree of tech savvy/soft skills for virtual communication and problem solving possessed by the virtual leader, building capacity of a culture for virtual learning/leading/working, and his or her view of the role of technology in virtual leadership.

Process gifting may include protocols/channels to discuss difficult issues; virtual mechanisms (such as meetings) to receive feedback and formats–tools that enhance virtual leading; creating boundaries in a boundaryless organization to provide a mechanism for fidelity, clarity, and success; and timely distinguished information flow. Formally designed processes inherent in organizational structures include policies, procedures, established cultural norms, management methods, operations, technology, and board adopted protocols. These systematic processes are also usually well organized, repeatable, scalable, transferable, and embed opportunities for learning and improvement. Many virtual leaders term the formal process elements as *'the givens'*; the elements that formally shape behaviors supported by the organization. At any given time, if a policy changes that relates to the virtual organization (i.e. a policy on intellectual ownership of digital artifacts), the virtual leader is faced with needed response changes to anyone in the

scope of the individual's leadership. Formal processes impact the behavior and response decisions of the virtual leader. Informal process gifting includes the following cardinal elements inherent in building capacity for dynamic virtual cultures: (a) developing trust and relationship building; (b) leveraging and growing skill sets in technology and virtual working, (c) virtual conflict resolution, (d) constructing communication, and (e) integrating technology/context/leader/team/targets.

Process gifting also includes strategic training opportunities in understanding the provision of synchronous and asynchronous transmission methods and space, for scheduling and preparation of virtual meetings, developing virtual relationships on a 1:1 scale, counseling and answering questions regarding process and content, assuring information flow and knowledge understanding for effective performance, monitoring performance of individual workers, and company as a whole. Process design and development is critical for virtual leaders to cultivate growth and success in virtual employees. Collaborating communication processes and aligning technology to the organizational systems is embraced as a first level priority when considering virtual leadership issues.

Content gifting includes the provision of templates/tool boxes-shared repositories/links/platforms for resources, task analysis, collaborative tech short-cuts/tips/tricks, recorded minutes to meetings, and any product/artifact that spurs engagement and subsequent performance success. Resource gifting/sourcing gold requires the virtual leader to be successful in obtaining stakeholder buy-in and ability for driving/inspiring/enticing/illuminating/creating/illusioning/manipulating/maneuvering/arr

anging (seducing) the virtual worker/student/team member to take what the leader is providing, engage, and be successful, virtually (in business/higher education/administration/education). Engagement maximizes outcomes for the organization, the customer, and the employee. To this end, the virtual leader is driven to maximize virtual worker engagement, including the multifaceted properties necessary for success; seducing engagement is a paramount phenomenon in virtual leading.

Virtual leaders, who provide the deliverables of process and content gifting, engender trust, which is foundational in building successful virtual cultures. Figure 2 illustrates the core variable, Seducing Engagement, and presents a condensed overview of the relationship between the core variable, subcategories, structural conditions, properties, and dimensions.

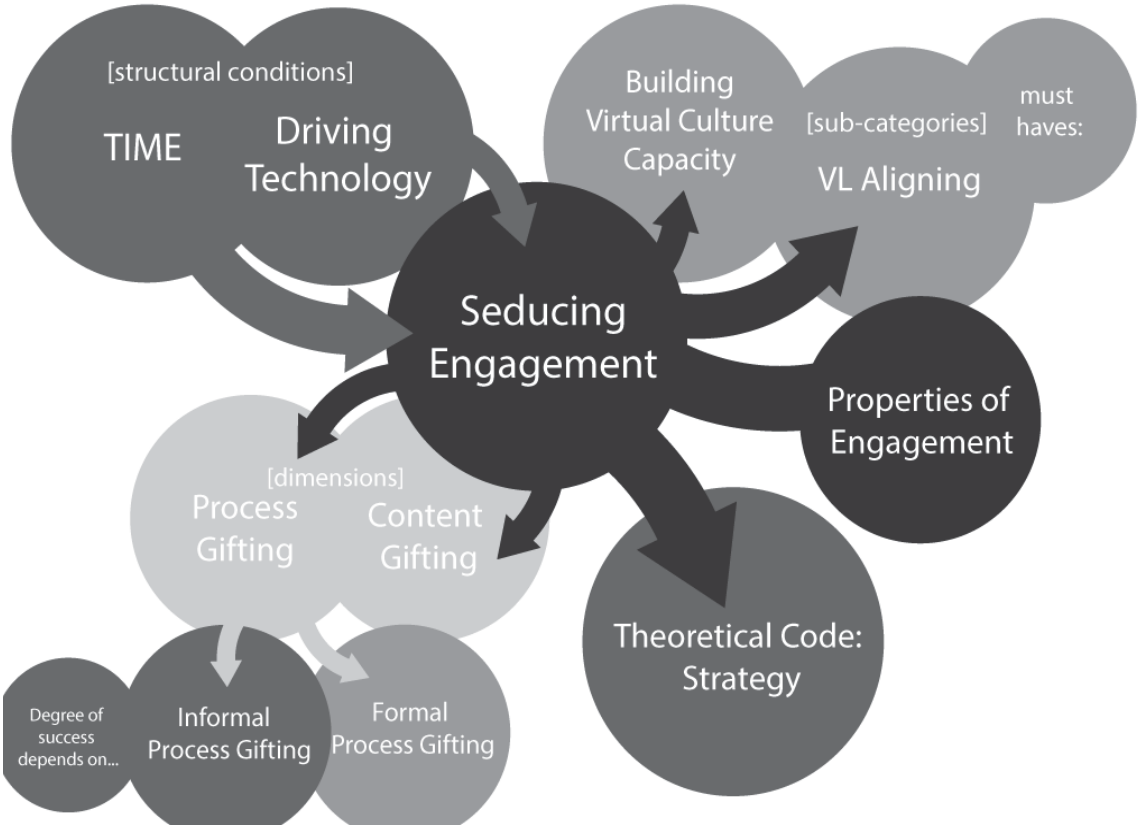

Figure 2. Illustration of core variable: Seducing engagement.

Properties of Engagement

Negotiating. Negotiating (their own successful work environment and outcomes) is a process involving dialoguing, problem solving, analyzing, synthesizing, forecasting, and mapping a course of action that will maximize benefits and satisfy interests of the collective whole. The virtual leader enables the virtual worker to provide information and effectively–efficiently work the plan resulting in personal success as the he or she grows in team effectiveness and organizational success through growth in virtual leading, achieving the milestones set within their positions as virtual workers/learners/leaders. A virtual leader is negotiating when they engender workers/learners into the mode of

working virtually, maximize worker/learner involvement, and focus on ways they (the leader) can facilitate artifact production and grow process skills in the virtual working arena. The aforementioned work is considered an investment to the larger aim of moving the virtual company; virtual leaders *do whatever it takes* (seduce) to make virtual workers successful. Virtual leaders inspire the worker/learner to extreme motivation and spur independence in the worker's role and associated tasks and responsibilities. Fashioning the position description around a virtual worker's strengths, passions, and selective skill sets is one example of spurring independence and motivation (Sheridan, 2012).

Negotiating is critical in executing all other properties of engagement, for the virtual leader and for the virtual worker/learner. Virtual workers/learners/team members develop skill sets in navigating technology tools, virtual platform features, and intuitive-sensing communication patterns inherent in virtual working and the virtual space/place resulting in the capacity to be successful with artifact production and the swift execution of connected process. Active engagement facilitates the process for full embodiment of company/organizational components of drive, success, and innovation. Dimensions of engagement emerged in this study only as related to the degree of seduction needed (high and medium); those who are fully disengaged drop off as virtual workers and would not be successful candidates to lead, virtually.

Connecting with the organization. Participant responses suggested that the capacity to be loyal to the organization begins with making an impacting connection with the company vision, mission, and goals. Opportunities to gain insight, knowledge, and understanding can be impeded in the virtual organization when virtual workers face

feelings of isolation and when they are not physically in the same space. Virtual leaders systematically connect with meaning at a personal level with the worker/learner/team member promoting socialization and relationship building, to prevent feelings of isolation, and to build self-sufficiency, motivation, and meaningful engagement. This includes dedicated time and space for people to connect at a deeper, personal level, before moving into the company tasks. Scheduling individualized time with the worker and making intentful connections with the worker to the organization are enduring investments when building trust and maximizing strengths in virtual workers who will become the future virtual leaders of the organization. Virtual leaders provide clarity and leverage the organization's vision, mission, goals, and strategy to the maximum. Knowledge and understanding are not sufficient without passionate connecting practices by virtual leaders.

Committing. Virtual leaders have a deep commitment to 'near addictive' enticement skills (seducing) with his or her virtual workers; the virtual worker must be inspired and spurred on to do what it takes to engage and be successful. Key factors such as collaboration, cooperation, innovation, creative design/development, and mindfulness are most important in the virtual space; each facilitates the capacity and unction to commit. These elements are also essential aspects of, and contextual to building capacity for a vibrant virtual culture (subcategory of seducing engagement). Dimensions of committing include structural, personal, and the predisposition to be seduced. The consequence of committing can vary, depending on the structural position held. For example, a student's commitment level impacts their success alone, however, if the

position held is a project manager lead, the risk associated with low level committing is substantive, and can result in losses directly impacting the project manager and the company. Factors that affect the personal dimension of committing include attitude, motivation, and perception of the organization. Components of commitment affecting the personal dimension include: (a) a strong desire to belong and remain a member of an organization, (b) a willingness to exert high effort levels in behalf of the organization, and (c) an identification with the goals and values of the organization (Mowday, Porter, & Steer, 1982; Randal & Riegel, 1965). The opportunity for a successful learning experience adds strength to the above personal dimensions of committing; similarly, negative learning experiences can impact the committing levels resulting in low committing. Salancik (1977) envisioned commitment as a person's state of being where actions influence their garnering repertoire and subsequent actions and levels of commitment. This research supports the above dimension of commitment, where levels can be capitalized on and increased to support virtual worker engagement. Previous research has supported that commitment levels develop through meaningful behavioral observation of role models (Baker, 2009; Falkenberg & Herremans, 1995; White, 1980). Frohman (1999) studied the phenomenon of change agentry within innovative technological organizations. His findings suggested that leaders behind the technological innovation/change demonstrated the following behaviors:

- persistence in the face of multiple obstacles,
- uses data to forecast decision making and initiates opportunities outside their responsibility domain,

- ensures tech savvy skill sets and knowledge acquisition through self-development and/or outside training,
- functions as a master initiator and results driver, and
- acts with a sense of urgency and passionate excitement for innovative action.

The third dimension of committing, the predisposition to be seduced includes: (a) the individual's openness, receptivity, and capacity to embrace and receive the seduction (e.g., resource gifting, including communication coaching, inspiring, illusioning, maneuvering, arranging, driving, manipulating); (b) the organization's commitment to providing effective technology tools for product— process development, including digital/conceptual/physical artifact tools; and (c) commitment for all properties of engagement.

Proactive forecasting. Speculating about what has not yet happened carries an element of uncertainty and risk in any environment (Carlsson, 2002); however, the virtual leader assures competencies in proactive forecasting in the virtual environment, given the fluid environment and rapid changes in technology. In the virtual organization, technology is a means, not an end. Purposeful selection of technology helps ensure mediated precision in the virtual working environment. Virtual leaders spur collaboration for innovative practice, and successful results. Forecasting includes the capacity to understand the virtual organization, determine performance indicators, and analyze data to align needed direction with targeted goals. Change is ineluctable and virtual leaders embrace a paradigm of anticipating, accepting, and growing to become an agent of change and a catalyst to paradigm shifting (Vakola & Wilson, 2004). For the virtual

leader, technology in leading promotes effective information handling, problem solving, product design, data analysis, collaboration, and innovative practices.

Emotional attaching. Pride, passion, enthusiasm, self-motivation, and deep connection are elements of emotional attaching. Emotional attaching is also a process that develops over time in the virtual worker, as they experience successful completion of tasks, events, artifacts, and gains for/in the organization that reflect on the virtual competencies they have demonstrated. Virtual leaders use recognition is a meaningful way to build trust, reinforce skill sets, and to create an atmosphere of oneness and emotional attaching. Mindful planning is inherent in the virtual leader's routine.

Owning. Establishing structure and individual ownership in others when working virtually is considered an exhausting task to the virtual leader. Building behaviors in virtual workers/learners that are crucial to ownership for virtual working, organizational commitment, and ownership to the vision, requires a climate of trust and consideration for job content that is aligned to the developed strengths of the virtual worker/learner in conjunction with the resourcing that is provided through the virtual leader.

Ensuring resourcing can be created or inspired: resource portals with artifact templates, recordings of meetings, written summaries of key points discussed, decisions made, needed follow-up action and direction for *next steps*; central publication point where virtual workers/learners can consume the *gold* (in-vivo code) information, virtually and collaborate virtually on their own terms and time-frame. Virtual leaders balance time between growth needs that require a process and those that result in artifact products for

the company/organization. This balancing facilitates virtual contributions from workers/learners.

Self-disciplining. Technology spurs *multitasking rituals* and creates avenues for efficiency, information management, and auto responders. Virtual leaders develop his or her set of task management interventions, most, if not all, involve tech tools. Sagacious tech tool use is considered more effective in virtual leading, rather than simply having access to leading edge technology. Technology use is inherent in virtual leadership time management and self-regulatory routines. Virtual leaders resolve organizational issues through self-discipline in developing communication and establishing meeting routines that include frameworks for process/content components for individual workers and work teams. Coordinating top priorities and obstacles enhance engagement and reduce isolation. Virtual workers–learners who are self-disciplined and organized, use proactive time management techniques, and possess an internal drive and resolve to advance the outcome. Using mentoring opportunities and meeting routines provided by the virtual leader, the worker/learner improves their skill sets for virtual working. The virtual workspace is customized to apply to the worker's/learner's specific needs and virtual tools to meet the needs. Virtual workers/learners who are self-disciplined are also self-sufficient, and do not have to rely on a team or collaborative atmosphere to be motivated or to spur creativity. Collaborative working adds rich meaning to the self-disciplined virtual worker-learner.

Power organizing. Social interaction enabled by technology spurs a new kind of organizing; virtual workers proactively plan and organize constantly and consistently and

in sprinted fashion. Effective virtual leaders encourage virtual workers to respond to others posts, qualify their responses, and develop proactive organization skills to be effective and efficient. Monitoring engagement and e-mail statements using action verbs and finding intriguing ways to pique workers attention and draw them in, nearly *move* the virtual worker into engagement.

Effective time managing. Managing time effectively is an essential skill set to virtual working. In some virtual organizations, difficulty managing time can adversely affect performance outcomes. The virtual leader is challenged with evaluating time management needs and sources for demonstrated dysfunctional time management. Schedules, regular communication, and accountability partnerships facilitate effective time management. Responsiveness and knowledge information application build trust in the virtual working environment.

Project driving. According to the virtual leader, the truest virtual workers are committed to their work and drive projects without having high levels of external stimuli from co-workers or managers. The true virtual worker understands how to create his or her own successful work environment and work ethic in order to be effective in participating virtually. Without the extreme core willingness and commitment to be an effective virtual employee, a worker/learner has a high risk of failure in a virtual environment; virtual leaders are charged with inspiring, instilling, growing, moving, inducing this *drive* in their virtual employees.

Telepresencing: Communication. Otto Scharmer (2007) explored the paradigm of presencing as a pivotal element of transformational leaders. Presencing infuses the

ability to connect deeply, abiding in the future realization of our possibilities in order to *live them into fruition*. Presencing infuses elements of presence and sensing, resulting in an individual's heightened potential to perceive, respond intuitively, and act in such a manner as to potentiate the fruition of such (Scharmer, p.8). It is the capacity to live the possibilities seen when sensing future potential. Telepresence is a substitute for face-to-face communications; however, to the virtual leader, virtual communication includes listening to the voice of another to communicate verbally and nonverbally, demonstrating perceptivity with workers and learners. Timely follow-up, constant and consistent meeting schedules/routines, involving others more, contribute to meaningful presence. The virtual leader strategically constructs communication techniques that ensure the capacity to exercise multisensory listening using technology (such as asynchronous communication on SharePoint or learning management system, teleconferencing with asynchronous platform, or a fully equipped VoIP providing voice communication and multimedia sessions). Virtual leaders demonstrate influential competencies when they frame the chosen technology around the assessed need (process and content). This requires the leader to understand the purpose or identified need, worker/learner or work team, and the most effective way to differentiate communication.

Artifact provisioning. Return on engagement grows a business, spurs employees' performance, satisfaction, and retention (Sheridan, 2012). Engagement involves behaviors and investment to make the difference in and organization. Artifact provisioning, whether physical, digital, or conceptual, is where the newly formed skills and patterns of virtual working emerge and connect to the system where innovation is

perpetuated. Virtual leaders contribute to high performing virtual organizations with strong artifact focus in conjunction with process focus.

Subcategories

The majority of participants in this study discussed the process of cultivating success in the virtual worker-learner as a problem/issue they face. As I used the classic grounded theory constant comparative method, systematic alignment of the data to the phenomenon of *seducing engagement* occurred. Subcategories emerged that relate to the core category:

Building virtual culture capacity. Technology is used as the tool that is building virtual culture capacity; technology is the tool that seduces (technology is seductive). In order to address the concern of cultivating others' success, virtual leaders focus on building *capacity* for the following elements within the context of a virtual platform:

- integrating technology/context/leader/team/targets
- trust
- communication constructing
- relationships
- leveraging and growing skill sets/technology and virtual working
- virtual conflict resolution

Virtual leaders demonstrate example setting as an inherent component of building the virtual culture capacity; this can spill over in cultivating virtual workers and dimensions of training/job skills. Understanding the systemic influences and impact of virtual teams and working virtually can be complex and include both positive elements

(cost savings and productivity) and negative elements such as isolation and the sense of being undervalued/used.

Virtual leaders who are able to practice *letting go* while fully trusting their virtual workers, engage in a selective hiring process that identifies individuals who not only have the capacity for autonomous work settings, but thrive on their autonomy and *self-develop*. This does not mean hiring individuals exclusively for their technical skills. Virtual leaders have a need to achieve a therapeutic balance between technical skills and interpersonal skills. Trust is cultivated when the virtual climate includes freedom and autonomy. Virtual leaders understand that building camaraderie and trust within the virtual platform is foundational to active and effective engagement. Virtual channeling includes partner-colleague support, collaboration, and facilitation of communications, virtual celebrations of success, trust building, and growing soft skills for virtual team effectiveness. Maximizing virtual culture capacity considers components of virtual channeling as a pathway to building each worker's virtual posture, presence, and voice. In the virtual platform, trust requires responsiveness to electronic communications from virtual workers/learners, feedback on performance, and fidelity in follow through.

Conscious teambuilding efforts in the virtual space facilitate the creation of a virtual water cooler experience, providing foundational components of maximized virtual culture capacity. Attention and deep engagement are exacerbated when the virtual leader provides rich opportunities for sensory saturation using technology inherent in the provision of process and content *resource gifting/sourcing gold* (seducing engagement for virtual success). Virtual leading requires the need to practice differentiated levels of

support in the virtual space, and demonstrate committed focus on interventions that facilitate newly discovered latent patterns that may become illuminated. Skilled telepresencing is a dimension of the virtual water cooler (one property of the structural condition of Driving Technology) and is characterized by the understanding that in the virtual space, mindfulness is imperative and near therapeutic, relative to problem solving and building trust with effective virtual communication technologies. This understanding has been supported by research in the area of virtual working and leading teams (Caulat, 2012; Sheridan, 2012).

Virtual leading requires mastering matters of transparency and visibility (the fish bowl) and driving intention as the center of communication; mindfulness is critical in building capacity for virtual cultures. Being aware of the context and perspective of the virtual space is a state of conscious awareness, where the virtual leader actively constructs categories, distinctions, themes, and focused content through the practice of mindfulness in the virtual space. When virtual leaders use mindfulness in the virtual space, workers/learners listen more intensively and see quickly with clarity, possible disconnections in communication, personal traits, and behaviors, since they are viewed and experienced as more visible virtually than they might be face-to-face.

The virtual leader continually develops and refines new behaviors: proactive initiative for communication and deep dedication in the virtual space, to discover who you are as a virtual leader, in order to spur process and product growth in others. A thoughtful leader uses many and varied techniques to help build relationships and grow productivity; however, the task is much more complicated than when leading face-to-

face. Instilling the unction, the drive, the knowledge, the vision in others, virtually, is a monumental undertaking. The process of cultivating relationships across borders and seeing people as people, using technology appropriately, supports virtual leadership. Vakola and Wilson (2004) identified five critical success factors inherent in the process of building virtual culture capacity:

1. virtual collaboration through water cooler connection;
2. knowledge, training, and information sharing through effective technology support;
3. cultural team working that considers high motivation and job satisfaction in elements of virtual working;
4. acceptance of change and effective change agentry paradigms; and
5. infusion of change agentry at the individual, group, and organizational level.

Virtual recognition and praise build individual members (acts that affirm value and worth), resulting in a strong team; trust and communication is enhanced when individualized needs for recognition and acknowledgment are met. Creativity is momentous (virtual recognition and other avenues are valuable). Reflective practice keeps the virtual leader grounded in growing leadership within individual team members and building capacity for virtual culture, including the inherent components of trust, communication, relationships, and skill set development. Widmer, Shippers, and West (2009) distinguished between reflection and aspects of reflexivity: reflection is concerned with deep thinking while making mental connections with experiences in order to alter thinking and spur action. Reflexivity encompasses reflection with individualized

personal action, and requires planned execution. The researchers acknowledged the difficulty in discerning weight and relevance measures of each individual component of reflexivity, and speculated that reflection, action, and planned/mindful intention are substantively integrated. Reflection in the virtual space promotes reflexivity for the virtual leader and his or her workers-learners. Research and theory in the area of reflexivity is relatively new, specifically related to elements and outcomes, however, the impact of leadership is considered to be a focused area under study (Schippers, Hartog, Koopman, & van Knippenberg, 2008). Reflexivity is a pathway for realization and fruition of one's capacity for leading virtually. Leaders involved in growing virtual cultures include the following elements as measures of growth in success of teams: (a) decision-making processes; (b) skill set in clarifying and teaching the art and practice of pausing techniques that build suspension in the listener (develops mutual respect) to capture the meaning of what others are saying; (c) assessing factors of collaboration, need for accommodation, and differentiated supports; and (d) understanding the relationship between conflict, resolution, and innovative change.

Expanding virtual cognizance is a critical skill set in building the capacity for a maximally successful virtual culture. Virtual leaders who practice a culture of collaboration, include the following skill sets: universal respect, mindfulness presencing, proactive seeking-understanding with resolution options, savvy and sensitive technology planning and use; and establishing goals that capture the essence and picture/vision of the organization. Execution Management in virtual leading involves the identification of those things that move the organization forward while growing virtual workers/leaders...

creating core values, living them, and using effective virtual tools (Participant 13, personal communication, September 16, 2014). Building capacity for virtual culture includes shifting paradigm thinking from a myopic view to organizational competencies for growth resulting in sustainable companies. Growing skill sets encourages virtual workers and learners to face challenges through enticing technology. As skill sets grow, confidence increases, trust builds for the virtual leader, ultimately contributing sustainable elements of a virtual culture. *Seducing* comes into fruition when the virtual leader is able to move the virtual worker—learner to the next level of success without the sense that they are compliant or dependant. This may be the cutting point in therapeutic seducing in the art and practice of versatile virtual leading. By giving process and content resources (giving the gold) and ensuring success, virtual leaders place themselves in the service of the virtual working team.

Conflicts are a normal phenomenon in any working relationship; virtual leaders anticipate conflict, with the expectation that if handled with integrity and following essential rules for virtual working, the outcome can be productive and add dimensions of trust, collegiality, and productivity to the virtual team. Most virtual leaders agree that the art of listening in the virtual space is indispensable. Video is not necessary to *hear* in virtual contexts, however, video can contribute to the multisensory/multidimensional virtual experience (especially when there is an element of learning and conceptual development as part of the purposeful meeting). Virtual leaders embrace effective listening for conflict resolution, when they respond swiftly and use mindfulness in speaking and listening (telepresencing). E-mails are seldom thought to be best practice

approaches in the virtual space for resolving conflicts and solving communication difficulties; rather, e-mailing can exacerbate communication obstacles when emotions are heightened. By facilitating problem solving in the virtual space, virtual leaders ensure a working atmosphere that spurs engagement for the worker.

Virtual leadership aligning. Virtual leadership does not develop naturally; aligning is a process that occurs over time and involves people, roles, skill sets, technology, training, organizational commitment for virtual platforms, virtual culture, information systems, and more. The process of aligning is systemic and considers the scope of the interdependencies between virtual team leaders, virtual workers–learners, stakeholders, technologies, and the vision/mission/values of the organization (Participant 5, personal communication, November 15, 2013). Virtual culture is born from the aligning process. This includes intangible elements of culture, leadership, governance, knowledge, image, and relationships (Edwards, 2000; Pal & Torstensson, 2011, p. 429). Aligning differences and disconnects can occur when the following is evident: (a) limited knowledge sharing and training; (b) prioritization [local, global, collocated/distributed]; and (c) tech knowledge/support/prioritization/reliance. Strategies for change within organizations, whether virtual or collocated, depend on proper alignment parameters at the system level (Edwards, 2000). Strategic decision making resulting in notable organizational gains for the customer service improvement requires a framing in alignment in direction and strategy beginning with the chief executive officer and company leadership inciting change through strategic alignment. According to Edwards (2000), synchronized alignment must include system factors such as: reward

considerations, coordination mechanisms, resource allocation/management/forecasting, leadership, information systems, and implementation/evaluative processes for each. Alignment is often considered the centering mechanism in systemic change and requires concerted efforts in assuring fidelity in commitment, conviction, energy, and resource allocation for successful systemic change and innovation (Edwards, 2000, p. 49).

Lester and Parnell (2002) studied critical organizational aligning factors in five companies who were targeting substantive change and renewal initiatives. Renewal was measured on the level of annual revenue increase, where a 15% increase was viewed as meriting a status of successful renewal. Five conclusions were drawn from the study that support the pivotal role of alignment in virtual leadership:

1. successful strategy configurations are mindful, balanced, rely heavily on technology for forecasting, knowledge information, and risk management;
2. improved information processing spurs organizational renewal;
3. collaborative decision making and facilitative leadership result in success and innovation in the renewal process;
4. company size requires mindful consideration of structural changes; technology enhances the framework for structural change; and
5. factors of centralization vs. decentralization are influenced by size and strategic behavior; technology holds substantive power in the capacity for organizations to operate strategically.

Structural Conditions

According to Hoch and Kozlowski (2014), structural supports can be the strongest qualifying factor in the capacity for virtual leadership effectiveness; the relevance and impact of structural conditions exacerbate as virtuality increases.

Driving technology: Properties.

Technology tug-of-war. Choosing effective technology can be deceiving; for the virtual leader, cutting edge technology is defined by the purpose/goals of the organization, virtual teams, and consumers. Changing technology is a continuous issue in virtual leadership. Instant change in technology is also an expectation in the consumer world. Technology management is a core component to virtual leadership. Yet, many virtual organizations separate technology operations from the service/product (Participant 77, personal communication, May, 29, 2014). Technology design and enhancement is consumer centered. An organizational goal within information technology infrastructure is to provide the consumer with a consistent natural experience that improves efficiency, quality, and high definition displays closer to reality with a heightened level of interaction, while aligning technology to the corporate strategy and visional business model (van der Hoven, Probert, Phaal, & Goffin, 2012). Technology development decisions that enhance power and function of the consumer experience consider risks and benefits. Many customizations are designed to reduce unique risks to companies/organizations (such as client privacy risks). Factors impacting technology management for individuals who lead virtually include fiscal stability of the company and focused organizational commitment to close the gap between existing technology and

what is needed to ensure virtual worker engagement. Ideally, technology and virtual leadership practice emerge and transform simultaneously, however, most virtual leaders find that technology is a function of the company/organization and the virtual leadership practitioner must infuse what is already normed in the organization. As a result, virtual leaders become their own designers and modifiers of tech tool use and development in conjunction with constructing and duplicating best practice communication options in the virtual space. Technology spurs *multitasking rituals* and creates avenues for efficiency, information management, and auto responders. Virtual leaders develop their set of task management interventions; most, if not all, involve tech tools. Enticing tech tools alone without mindful discernment tech tool selection and *use* will marginalize the organization, its customers, and team members (Participant 5, personal communication, November 15, 2013). Effective and efficient technology use, including the knowledge of what technology can, and cannot do, is inherent in virtual leadership time management.

One mindset and full alignment (at all levels, from owner down to distributed workers) in paradigm shifting for virtual leading and working is critical in the process of building capacity for virtual culture, engagement, and the process of reorganizing an organization toward virtuality. A fully virtual organization recognizes both collocated and distributed work teams, being fully accessible to both and systematically selecting technology, policies, procedures that support this (full accessibility). For the virtual leader, best practice technology:

- is reliable,
- is aligned and supported,

- provides a variety of tools/resources promoting collaboration and capacity to build communities,
- facilitates culture of learning, collegial collaboration, and landscape for global development and production.

van der Hoven, Probert, Phaal, and Goffin (2002) identified six key activity categories that contribute vital elements of organizational structure, operating processes, and general governance within the scope of technology leadership positions: (a) creating technology management infrastructure, (b) determining technology entry/exit points, (c) preparing the technology business plan, (d) driving operational improvements, (e) managing the technology mindset, and (f) aligning technology to corporate strategy and business model. Transition points in determining priorities included factors such as changes in company ownership, leadership, governance, economic context, competitive context, customer/supplier context, technology context, and management tools (van der Hoven et al., 2002). The virtual leader is charged with multifaceted considerations relative to technology management functions of leading virtually.

Virtual water cooler. For virtual leaders, technology is the conduit for communication, knowledge sharing, and building relationships. How is technology used to spur presencing? Technology can be used as the portal and modality in giving-receiving meaningful reflections; it augments human interaction and contributes to a potent virtual water cooler experience. The virtual water cooler functions as the virtual hub for communications, discussions, and feel of community in connecting, bonding, and giving-receiving recognition. The *perfect virtual day* for many virtual leaders begins

with a virtual check in the water cooler (Participant 5, personal communication, September 24, 2013). A dedicated place to build a virtual culture includes check-ins termed *virtual huddles* that establish meeting routines including process and content updates. The water cooler serves as a mechanism to build capacity for powerful virtual cultures.

Virtual water coolers can be the springboard and portal to developing and aligning the virtual culture and a leading driver of engagement. Technology provides an open door to the virtual coffee house where natural drop-in activity is supported. In building capacity for culture via the virtual water cooler, virtual leaders demonstrate creativity, sensitivity, resolve through much trial and error, and intuitive facilitation skills to garner people through the phenomenon of a virtual water cooler. Degrees of collaboration technology include: (a) cool, (b) warm, and (c) filled water cooler. The filled water cooler gives virtual workers a sense of connection, visibility, and authentic opportunity to create enduring collaborative partnerships. Support, encouragement, synergy, and solutions, can be found at the virtual water cooler.

Virtual leaders recognize the link between responsive communication and engagement growth-slippage (Hoch & Kozlowski, 2014). Social networking tools are often the preferred mechanism for virtual leaders to provide regular opportunities for fortuitous encounters resulting in conversations that resemble the type of communications that occur in frequent face-to-face experiences. Virtual leaders experience challenges when their company or organization does not directly support active use of technology tools for social networking, including the failure to embrace the value of indirect work

conversational activity as a mechanism for building capacity for a successful virtual culture.

One aspect of resource gifting (giving the gold) is assuring the alignment of technologies; ensuring all virtual workers have equal tech tools and apps, determining what is therapeutic to workers, a daily touch-base, formal meetings, on-line tapping solutions, and innovative ways to share information (knowledge management). Spurring participation becomes a virtual leadership craft; promoting water cooler conversations are valuable in seducing engagement and provide a culture of trust, rest, encouragement, and problem solving around a virtual table. Inherent features of the virtual water cooler provide the need for proactivity in facilitating trust based on responsiveness, consistency, and synergy (Kirkman, Benson, Gibson, Tesluk, & McPherson, 2002).

Aligning v-etiquette protocols. Proximity factors influence the virtual leader's natural propensity to elicit feedback/contributions/problem solving from those who are collocated. *Privileging* is a phenomenon that creates inequity among virtual team members and may be a fatal flaw of virtual leaders. Policy, technology, and positional support at all levels, including virtual space, facilitate the development of the virtual leader's capacity to find their influence, presence, and effectiveness in the virtual space. Virtual leaders are faced with platform/presentation decisions regularly and may choose to 'mix' collocated and distributed workers-learners in meetings, training sessions, and 'collaborative check-ins' (in vivo code) based on compromised technology, time restraints, and/or organizational policy. When this occurs, distributed workers-learners report feelings of isolation, invisibility, and disempowerment (in vivo codes), resulting in

a compromised capacity for active engagement. Creating a paradigm of collaboration as exemplars where the virtual platform can be a showcase for communication, artifact process, and product, is a noteworthy goal for virtual leaders. Technology is a tool and the portal for virtual working. To this end, the virtual leader is faced with a continual challenge, to assure that the technology does not drive the process of virtual working. For the virtual leader, general principles for maximum technology effectiveness are considered in all virtual meetings, training opportunities, and design considerations of a powerful virtual water cooler. Hints and tips are one of numerous resources that virtual leaders provide their virtual workers/learners with, to enhance the process and outcomes of meaningful engagement.

Time: Properties.

Zones. How do time and distance impact the channel and process of communication? Collocated team members compared to those who are virtual (distributed) seem to receive differing levels and types of leadership responses; the virtual leader may be demonstrating privileging in his or her leadership. When technology is not infused in the virtual leader's repertoire, it is easier when the virtual channel (medium) includes collocated members; there is a sense of physical attachment and congruence with the leader. The virtual vs. collocated team scenario is a structural condition in which behavior is impacted.

Technology facilitates the need to be flexible and available for all time zones. Zone differences create barriers to synchronous meetings, however, asynchronous meetings meet all time-zone needs and are used for several virtual interventions: making

sense of information, exploring work outcomes, updating projects, brainstorming, and extending responses. The artful practice of accommodation is a constant ebb-and-flow in the virtual space as an integrated measure of differentiated virtual leader support. Discriminating tools and processes help the virtual leader discover and embrace the most meaningful way to spend time with virtual team members; synchronous vs. asynchronous, 1:1 vs. full team, while avoiding a leadership impediment of transferring a face-to-face based paradigm of leading-working-learning into the virtual space, in conjunction with considerations for cultural differences and potential language barriers.

24-7 phenomenon. The nature of virtual leading and virtual working make it challenging to separate work and non work. Online tapping (in vivo code) occurs in evenings and on weekends. This invasion of time management considerations has the potential to disintegrate valuable work-life balance for the virtual leader. There is a looming sense that the virtual leader must be on duty and available. For the virtual leader, this can be a perceived expectation, authentic expectation, or created expectation.

Expert level technology skill sets both help and hinder the 24/7 phenomenon. Technology can expedite time but also creates a sense of 24/7 availability. Mindfulness presencing in others cannot be accomplished through online tapping. Quality of life is marginalized when there are expectations for 24/7 responding work schedules as a virtual leader. The 24/7 phenomenon has introduced significant stress on virtual leaders; time boundary abusing contributes to a new unit of insidious abuse in virtual organizations in the boundaryless organization (Participant 1, personal communication, September 13, 2013). When there are no time boundaries, due to technology enhancements, the

condition must be managed within a leadership skill framework or virtual leaders can begin to feel trapped, finding themselves in a place where they work longer and harder, for the same outputs previously experienced. Effective virtual leaders develop awareness and recognition of timely opportunities and authentic pathways to influence and drive the use of technology (building virtual culture capacity via technology).

Summary

This classical grounded theory study explored the perceived concerns of virtual leaders. The core variable that emerged directly from the data was seducing engagement. In order to ensure effective virtual working with employees/learners, the virtual leader will go to any length to provide resources (resource gifting), process pathways, training, support, encouragement, and maximized effort in cultivating multidimensional commitment from virtual workers to grow the organization. Subcategories of Seducing Engagement include Building Virtual Culture Capacity and Virtual Leadership Aligning. Cultivating trust, relationship building, leveraging and growing skill sets for technology and virtual working, virtual conflict resolution, communication constructing, and integrating technology are components of building virtual culture capacity. The virtual leader must ensure alignment in organizational vision, mission, technology, and processes between virtual workers/learners, stakeholders, and leaders.

Structural conditions of the core category include Driving Technology (Technology Tug-of-War, Virtual Water Cooler, and Aligning V-Etiquette Principles) and Time (Zones and 24/7 Phenomenon). In virtual working, technology management is considered a critical factor in dealing with conflict virtually, effective and proactive and

multidimensional communication platforms, and innovative design. Factors of time and distance impact virtual leading and working and technology facilitates the need to be responsive and available in various time zones. Virtual leading and working have inherent challenges of work life and personal life separation. The virtual leader who practices reflection and reflexivity cultivates his or her capacity for true leadership in the virtual space. Chapter 5 includes an interpretation of the results, a discussion of how the results can be communicated to virtual organizations for positive social change, recommendations for further research and practice, and a final statement on the study.

Chapter 5: Discussion, Conclusions, and Recommendations

The purpose of this grounded theory (GT) study was to discover an explanatory theory, derived from data, which facilitates an understanding of virtual leadership, including aspects of systems and processes. In this study, I pursued an exploration of virtual leadership leading to an emergent-patterned core dimension or facet that will inform practice and advance the phenomenon of virtual leadership.

The following research questions framed this grounded theory study:

- What theory explains the effectiveness of a leader in his or her role within a virtual organization?
- What are key elements of effective leadership systems and processes in the virtual organization?
- What is the role of collaboration (if any) in virtual leadership?
- What specific interaction issues and systemic conditions influence the virtual leader's strategies?
- How do leaders of virtual organizations perceive the qualities of effective leadership skills for virtual organizations?
- What is the role of technology in communication, collaboration, problem solving/decision making, and effective leadership processes within the virtual leadership system?

This classic grounded theory study examined virtual leadership systems and processes and the perceptions of individuals who hold leadership positions in virtual organizations. The interest and purpose of this study were to pursue an exploration of

virtual leadership leading to an emergent-patterned core dimension or facet that informs practice and advances the phenomenon of virtual leadership.

The core variable that emerged from this classic grounded theory study was seducing engagement. Because this was a grounded theory study, the core variable emerged as a result of data collection, constant comparative analysis, memoing, and theoretical sampling. Classic grounded theory or the Glaserian model provided the framework for the research design of this study. All initial interviews were conducted electronically through e-mail, by phone, or in person; follow-up interviews were completed using Skype, phone, and e-mail. Analyzed extant text data were acquired through Internet discussion boards, mass media documentaries, and correspondence. I attended three of Dr. Barney Glaser's grounded theory seminars during the journey of this study. Glaser's (B. Glaser, personal communication, October 20, 2012, June 20, 2013; Glaser, 1998, p. 8) dictum "all is data" resonated as I began the selective coding process. As a result of my mentor–counsel consultancy with Dr. Glaser and fellows of the Grounded Theory Institute, my confidence matured, in the process of incorporating as many data sources as possible. Data analysis, memoing, and theory emergence comprised an indistinguishable process; there was no distinction between the process of data analysis and the emergence of the theory of seducing engagement (Glaser, 1978; Glaser, 1998, p. 139; Glaser & Strauss, 1967).

This study generated a theory of seducing engagement that addressed the main concern of participants in this study: the process of *cultivating success* in the virtual worker–learner. The analysis of the generated data produced a theory that demonstrates

fit and applicability, explains how participants solve their main concern, and is modifiable; these are criteria used to evaluate the sufficiency of the data (Glaser, 1998, p. 9).

Interpretation of the Findings

As the field of virtual leadership is an emergent discipline with limited research findings, the classic grounded theory design resulted in the generation of a hypothesis from data. The chosen design does not use theories found in literature until the core variable emerges with the theory established enough to assimilate other research results from a review of literature (Glaser, 1998, p. 76). To this end, the literature review was incorporated into emerged subcategories, properties, structural conditions, and dimensions directly from the data, within the results section of Chapter 3. The subsequent literature review focused on (a) key components inherent in building virtual culture capacity—trust, relationship building, and communication; (b) the phenomenon of aligning; and (c) technology decision making. Literature review findings augmented the emergent theory of seducing engagement, as none of the reviewed literature addressed the topic from a virtual leading framework.

The theory of seducing engagement is supported by systems theory and change theory. As reflected in Chapter 1, systems and knowledge become grounded in context (such as a virtual organization) where intention is spurred through the inclusion of awareness, wisdom, and intuition; leaders and people at all levels in all systems are increasingly presented with disruptive challenges and changes that require them to let go of old patterns of thinking and behavior and to sense new future possibilities. These

challenges may be techno-economic, relational-political, or cultural-spiritual—or all three (Scharmer, 2007, p. 227).

Scharmer (2007) used collaborative action research over a 10-year span to explore a new paradigm called *presencing*, or the ability to connect with a higher source, a place in the future of one's knowing. Presencing is a "blending of 'presence' and 'sensing,' and means to sense, tune in, and act from one's highest future potential-the future that depends on us to bring it into being" (Scharmer, 2007, p.8). Scharmer described a social technology of transformational change that will catalyze meaningful avenues for leaders in meeting personal and organizational issues (p. 5). Leaders, according to Scharmer, include all people who engage in creating change or shaping the future, regardless of any position held. Theory U is a theory, a model, and a method to discover the essence of leadership as a lifelong process of knowing self and through a transformative process, contributing to social innovation (Scharmer, 2007). The "U" process is the deeper place where Scharmer suggested that transformational leaders operate, pulling the individual into an emerging state of future possibilities. His research investigated elements that grow a person into the capacity to presence and sense, resulting in an individual's heightened potential to perceive, respond intuitively, and act in such a manner as to potentiate the fruition of such (Scharmer, 2007, p. 8). The social space within the "U" process concerns the quality of how individuals attend to the matters of the world, each dependent on four different positions of one's attentive framework. They include the following: (a) what individuals perceive based on developed habits of seeing the world; (b) what individuals can see, with their senses and mind wide open; (c) what can be seen,

with the heart wide open; and (d) what can be understood, with an open will. Effective leadership moves from the first and second levels to the third and fourth, achieving profound renewal and change.

Scharmer (2007) described the *blind spot* as the place where all attention /inattention originates. He reflected that the most significant insight in discovering Theory U included the infusion of two different sources of learning: (a) learning from previous experiences and (b) learning from the experiences of the future not yet experienced (Scharmer, 2007, p.7). The "U" process includes mind blending reflective thinking by which authentic results can be realized. Five key insights into this paradigm shift in leadership technology are as follows: (a) cultivation of the open mind, open heart, and open will, to develop a new social technology on a collective and collaborative level; (b) the most important leadership tool is the self, emerging into an authentic presence of self; (c) the leader must work with three enemies of the inner self—the voice of judgment, the voice of cynicism, and the voice of fear; (d) the "U" is a living field, where each component reflects the whole, in a prescriptive way, and (e) to experience the practice of presencing, one must *absence*, or let go, of the destructive voices and operate from the future as it emerges.

Core processes for mapping the "U" include the following:

- *Downloading* is the capacity to break the cycle of habitual patterns of the past, in order to position self or organization for new patterns to *emerge*. Organizational obstacles to downloading include not recognizing what is

observable, not saying what is thought, not doing what is said, and not seeing what is done.

- *Seeing* includes the principles of clarifying intent, moving into contexts that matter, and suspending judgment and connecting to wonder.
- *Sensing* is the capacity to transcend the feedback cycle of habit patterns of past, in order to fully participate in the cycle of change as a whole; resulting is the deep diving experience down the left side of the "U", into an open heart, followed by moving up the right side of the "U", into a creating mode.
- *Presencing* is the capacity to look to future possibilities and making it real.
- *Crystallizing* is clarifying the emergent vision into the future of possibilities. It involves mindful intention, grand will, letting come, and moving toward the flow of a creation state.
- *Prototyping* is remaining connected to the mindful intention, moving away from the habitual past and status quo, to the emerging future.
- *Performing* is where the newly formed patterns emerge and connect to the system where innovation resides.

Scharmer's theoretical application of transformational leadership provides practical application and meaningful connections for leaders in virtual organizations (Scharmer, 2007).

Virtual organizations are characterized by a continued state of transforming behavior and innovative practices. Effective leadership in the virtual organization uses integrity when building and demonstrating factors of self-awareness, perspective,

flexibility, reflexivity, service posture, and commitment to continuous learning, training, and practice in order to be an effective change agent for the organization.

Scharmer's Theory U model supports the Theory of Seducing Engagement where the social technology of leadership includes virtual leaders who are globally *shaping the future* (Scharmer, 2007, p. 5), through technology and virtual working-learning. The tenets of Theory U are infused in the virtual leader's authentic seducing strategies for engagement. Scharmer's reflection (2007) that two sources of learning inherent in practicing presencing include past experiences and experiences from the future as they are emerging, integrate the process of reflexivity, which is a meaningful component of the subcategory titled Building Virtual Culture Capacity.

Additional tenets of Theory U that are manifested in the Theory of Seducing Engagement include:

- The core processes of sensing and presencing are prerequisite to the capacity for virtual leaders to provide process and content gifting (gold sourcing/resource gifting, in vivo code) and maximize others' success through therapeutic efforts in balancing-shifting between process and content gifting, premised on differentiated needs of virtual workers.
- The capacity to remain connected to the mindful intention of the emerging future while letting go of habits and mindsets that no longer work in the virtual world is a critical factor in all properties of engagement: negotiating, connecting with the organization, committing, proactive forecasting, emotional attaching, owning, self-disciplining, power organizing, effective

time management, project driving, telepresencing-communication, and artifact provisioning.

- Understanding systemic influences, organizational obstacles and patterns of behavior that inhibit emergent properties and dimensions of trust, leveraging skill sets, technology integration, communication, and conflict resolution require the virtual leader to remain in a continued state of prescriptive presencing based on the identified core processes in Theory U. Resulting is the capacity to demonstrate change agentry and cultivate maximized capacity for change agentry in others.

Tichy and Devanna (1990) identified the following sequence in managing change and transforming an organization that proactively anticipates the effects of change on the organization and followers: (a) recognize the need for change, (b) manage the transition, (c) create a new vision, and (d) institutionalize the changes. Transforming leadership in a forced change situation includes the following responses that may reduce potential negative effects of change on the virtual learning environment: (a) ameliorating derailing behavior, (b) trust building through integrity and example, (c) individualized consideration, (d) provision of information and authentic practice, (e) intellectual stimulation that augments creativity, creative problem solving and collaboration, and (f) deep commitment to the challenge (Avolio & Yammarino, 2002).

Monitoring, planning, implementing and managing change in the ever-changing virtual organization requires dynamic people, integrated resources, community culture and vision for meaningful response to internal and external opportunities and threats.

Key elements of success may include the following: (a) the provision of authentic attitude and skill enhancement opportunities; (b) the creation of comfort zones and support for diversity, energy, information and spirited dialog about teaching-learning and change; (c) relationship patterns within the organization that promote integrity and stability through identification activities; (d) forums and communities of practice to enable review and decision making; and (e) concentrated efforts to empower individuals in making decisions, delegating responsibility, and planning a coherent vision rather than a strategic plan (Cunningham & Cordeiro, 2006).

As leaders and theorists of today speculate on the future direction, based on what is known about the information-rich world, virtual organizations, globalization, culture, and ubiquitous leading-learning, effective leadership will necessitate lifelong learning within flexible learning cultures. Schein (2004) forecasted elements of flexible cultures:

1. Cultural frameworks that include proactive problem solving and differentiation within processes and solutions.
2. A lifelong learning culture and a commitment to understanding through feedback, reflection, evaluation, and response flexibility.
3. Leaders who have positive views and expectations about human nature.
4. A learning culture that supports environmental management and growth.
5. Commitment to seeking the truth and inquiry based flexible learning environments.
6. Directionality toward futures forecasting and effective solutions for targeted issues.

7. Commitment to diversity, systemic thinking, collaborative endeavors, and cultural analysis resulting in meaningful understanding, organizational success, for the community at large.

Effective virtual leadership requires and embraces a working understanding of change processes, cultural components impacting change, and change management skills that facilitate transformational change. Technical skills in connecting theoretical models to successful application result in enduring value level changes; rapid changes in technology provide data measures that spur the leader, worker—learner, and organization in successful change efforts (Tichy & Devanna, 1990). Business globalization and company virtualization have created a new set of leadership issues that illuminate the need for the aforementioned change management sequence. The subcategory of virtual leadership aligning is steeped in tenets of change management including visioning, trust building, differentiated and prescriptive training and support, consensus building, virtual presencing, strategic technology training and infusion, transparency, and congruency. Tichy and Devanna's findings support the virtual leader, virtual worker-learner, and virtual organization dynamic as presented in this classic grounded theory on seducing engagement.

Limitations of the Study

This grounded theory study presented virtual leaders' overt latent patterns of behavior. One speculated limitation listed in Chapter 1 included the purposive sample group of virtual leaders. The purpose of this study was to discover an explanatory theory derived from data that facilitates an understanding of virtual leadership, including aspects

of systems and processes. To this end, a purposive sample group was required and appropriate for this targeted group. Another listed potential limitation of this study was the data using a retrospective view of the participants' perceptions and descriptions of accounts within their practice and experience, which may have included levels of recall bias. The last identified potential limitation was the concern that participants provide perceived ideas rather than direct observations of the participants in the authentic lived experience; perhaps the participant may behave differently in reality as compared to the perceptions of the lived experience. Both speculated limitations are truly not limitations using the constant comparative analysis method, which assured conceptual emergence, rather than descriptive data analysis.

Recommendations

Based on emergent categories that held significance in this study, topical recommendations for future research furthering the knowledge and application of the phenomenon of virtual leadership include:

- Exploring the process of '*becoming*' a virtual leader; every leader has their story on the process of *becoming*, including the gaps in opportunities to learn and practice reflexivity, understanding key elements of successful virtual leading, and strategies for managing structural conditions, such as technology, the virtual water cooler, and aligning virtual presencing and etiquette (i.e., how to read electronic body language and using virtual worlds and social media for presencing). Who are the new virtual leaders? According to E.M. Kaye (2012):

> ... they are game changers who inspire employees, engage customers and lead their organizations safely through the emerging technologies to success... virtual leaders are augmenters, coaches, direct relationship builders, entertainers, fearless risk takers, instant gratification gurus, new technology evangelists, sales masters, smart crowd networkers, three-dimensional thinkers, virtual solutions champions, transparency advocates, and virtual team builders... they harness rapid technology changes and know the steps in taking the virtual company to the next level. (Kaye, 2012, Chap. 2, para. 2)

Further inquiry in this area would result in substantive contributions to valuable training, executive coaching, and selection platforms and models for virtual leadership.

- The phenomenon of *privileging* (the virtually invisible); this phenomenon captures the experience of distributed virtual workers-learners (not collocated) who experience frustration, detachment, invisibility, confusion, futility, and dis-empowerment when the virtual leader knowingly or unknowingly practices privileging with collocated workers/team members/leaders/learners. Privileging can be a fatal flaw to the virtual leader; further research in this area can ensure effective virtual leading with collocated and distributed workers. Technology and related properties, such as alignment, flexibility, use of social media, etc. are critical components in the phenomenon of privileging.

- *Aligning* factors for technology considerations; aligning is a significant factor in change agentry and systems design. Technology is the enabler/mechanism/portal for virtual organization success. Virtual working and technology should evolve simultaneously (technology is the tool, not the driver). Further inquiry in the decision making process, resources, and company-consumer elements that impact and influence aligning will result in significant illumination for core decision-makers within global organizations.
- The process of growing a 'filled' water cooler; the phenomenon of *virtual presencing*. The water cooler is essential to the growth and capacity of a thriving virtual culture and can be used to compel virtual workers into virtual presencing, deep inquiry, synergy, and successful growth. Water cooler technology design considerations include: embedded networked devices integrated into the virtual environment and devices that can be context aware (ambient), personalized, adaptive, and anticipatory. Otto Scharmer's work (2007), resulting in his construction of Theory U, captured the process he labeled "presencing". He combined the words *presence* and *sensing*. Presencing allows individuals to experience a hyper-sense of attention to their self and their will, to the degree that they are able to operate from a future state of possibility, based on what they perceive is desired to emerge. Scharmer (2007) viewed the capacity to facilitate others into the shift from present state to future possibilities as the essence of leadership. Successful leadership, according to Scharmer (2007), depends on the quality of attention

and intention that the leader brings into any situation. The virtual water cooler presents the mechanism for virtual presencing. Dimensions of the water cooler include cool-warm-filled. Further study in this area could provide valuable understanding into the compelling factors for building virtual culture capacity.

Implications

The findings from this study provide meaningful data and implications for virtual organizations to gain understanding and embrace recognition of critical considerations for resource allocation, research targets, and paradigm shifts needed in identified substantive areas of virtual leadership for global impact. Virtual leadership facilitates the connection between technology and the organization, virtual worker—learner, and customer. Seducing engagement as a theory for virtual leadership responded to the critical need for new theories to guide the emergent practice of organizations moving into global business opportunities, resulting in virtual working, virtual leading, and virtual learning. This study responded to a significant gap in research on the topic of virtual leadership, by advancing a theory derived from rigorous application of CGT methodology (Glaser, 1998). The Theory of Seducing Engagement can be applied to the field of virtual leadership to explain, rather than describe, what issues virtual leaders face and how they solve the issues (Glaser, 1998; 2002).

As organizations hire employees who will inhabit a virtual office with virtual presence and flexible work schedules, the Theory of Seducing Engagement will provide meaningful applicability, addressing technology, as a substantive structural condition, an

enabler of the virtual work environment, including the virtual water cooler with multiple dimensions of telepresence (emerging, mechanical, and skilled). The present global-mobile options available allow organizations to offer choices to workers regarding how and where they work to maximize effectiveness and efficiency. Technology advancements continue to provide global-mobile opportunities for ensuring company/organizational success. Resulting is the onset of new virtual cultural norms and protocols for virtual working. This paradigm shift creates substantive need to ensure effective virtual leadership. Virtual leading encompasses a systems approach, including inter and intra aligning components encompassing numerous areas (e.g., roles, skill sets, technology, training, organizational commitment for virtual platforms, virtual culture, information systems, and more). The evolution of management theory-styles to present leadership thinking has been premised on face-to-face environments (DeRue, Nahrgang, Wellman, & Humphrey, 2011). New leadership that aligns to the present interconnected global world is needed in order to cultivate success in the virtual worker—learner, and increase business opportunities and connect globally.

From an applicative standpoint, this research study may facilitate the practicing virtual leaders' knowledge and understanding of subcategories, properties, and dimensions of categories and properties related to the phenomenon of virtual engagement. This has implications for performance in virtual leaders, who affirm their interest and need for training and support in their goal to cultivate success in virtual workers—learners. A second implication is directed at the virtual organization; to use the findings in providing knowledge and understanding in the systemic facets of operating a

successful virtual organization and providing applicable virtual leadership training with significant impact on the organization and the members that operate within them.

Given the increased growth in virtual business, there is a resulting trending need for leadership freelancers. Freelance virtual leaders address specific needs identified by the company; with little or no physical infrastructure supporting virtual companies, there is a growing need for effective virtual leaders who can create new knowledge, transform knowledge for others, and cultivate success in the virtual worker. Further, with the increasing movement toward virtual organizations and globalization, the phenomenon of virtual leadership is becoming nearly gravitational; the Theory of Seducing Engagement is grounded in data by virtual leader-practitioners. To this end, the findings of this study have substantive applicability at multiple levels: virtual leaders, virtual organizations, executive coaching companies, higher education institutions, and researchers interested in furthering contributions to the body of knowledge on virtual leadership.

Every organizational change, no matter the degree, requires one or more change agents; the degree of success of any change effort depends on the change agent's capacity to understand the dynamics and components of needed change and the relationship between and among the change agent and identified decision makers within the company/organization (Lunenburg, 2010). This need is further exacerbated by data supporting that 13% of employees worldwide are engaged; idle disengaged workers outnumber engaged employees by nearly 2-1; costing the nation an estimated 450-550 billion dollars in lost wages (Gallup, 2013). The findings of this study contribute

significantly to the knowledge information model for the phenomenon of virtual engagement.

Conclusion

Leading at a distance has emerged with complex global changes, resulting in the multifarious use of technology, virtual teams, and collaboration as a way of solving problems and growing innovative and successful organizations. In 2002, Bernard Bass forecasted that in 2034, virtual teams and e-leadership would "be the rule rather than the exception" (Bass, 2002, p. 383).

The phenomenon of virtual leadership has not been evidenced in research; the purpose of this grounded theory (GT) study, was to discover an explanatory theory, derived from data, which facilitates an understanding of virtual leadership, including aspects of systems and processes. Virtual working is recognized as essential in considering the trending globalization movement (e.g., cultural, economic, demographic) through technology, the need to contain costs while growing companies and remaining competitive across continents, and the interest in, and skill sets for many individuals to work virtually.

Virtual leadership is an inherent component of virtual working. This study provides awareness and insight into the complex and multifaceted phenomenon of virtual leadership. Through the Classic Grounded Theory research design, data revealed that a virtual leader's greatest concern is cultivating success in the virtual worker and *engagement* is viewed as a significant variable to successful virtual working, virtual leading, and organizational/company success. Additionally, this study presents several

pivotal areas for further research, which will contribute to the body of knowledge regarding the phenomenon of virtual leadership.

References

Alexander, S. (2006). Rethinking curriculum: Achieving qualitatively different outcomes using information technologies. *Research and Practice in Technology Enhanced Learning, 1*(2), 157-161. doi:10.1142/S1793206806000093

Andreadis, N. (2009). Learning and organizational effectiveness: A systems perspective [Entire issue]. *Performance Improvement*, *48*(1). doi:10.1002/pfi.20043

Avolio, B. J., & Yammarino, F. J. (2002). *Transformational and charismatic leadership: The road ahead*. New York, NY: Elsevier Science.

Baker, T. (2009). Towards a new employment relationship model: Aligning the changing needs of individual and organization. *Leadership & Organization Development Journal*, *30*(3), 197-223. doi:10.1108/01437730910949508

Barbosa, J., Barbosa, D., Hahn, R., & Saccol, A. (2011). A ubiquitous learning model focused on learner interaction. *International Journal for Learning Technology*, *6*(1), 62-83. doi:10.1504/IJLT.2011.040150

Basit, T. (2003). Manual or electronic? The role of coding in qualitative data analysis. *Educational Research*, *45*(2), 143-154. doi:10.1080/0013188032000133548

Bass, B. (1990). *Bass and Stogdill's handbook of leadership: Theory, research, and managerial applications* (3rd ed.). New York: NY: The Free Press.

Bass, B. M. (2002). Forecasting organizational leadership: From back (1967) to the future (2034). In B. J. Avolio & F. J. Yammarino (Eds.), *Transformational and charismatic leadership: The road ahead* (pp. 375–384). Boston, MA: Elsevier Science.

Bazeley, P. (2010). *Qualitative data analysis with NVivo*. Thousand Oaks, CA: Sage.

Bjorn-Andersen, N. (2003). *Ambient organizations*. Copenhagen, Denmark: Centre for Electronic Commerce, Copenhagen Business School.

Brown, S. R. (1993). A primer on Q methodology. *Operant Subjectivity: The International Journal of Q Methodology*, *16*, 92-138. Retrieved from http://www.operantsubjectivity.org/col/120/

Busch, E., Nash, J., & Bell, B. (2011). *Remote work: An examination of current trends and emerging issues.* Ithaca, NY: Center for Advanced Human Resource Studies, Cornell University.

Caffarella, R., & Zinn, L. (1999). Professional development for faculty: A conceptual framework of barriers and supports. *Innovative Higher Education*, *23*(4), 241-254 doi:10.1023/A:1022978806131

Carlsson, C. (2002). Decision support in virtual organizations: The case for multi-agent support. *Group Decision and Negotiation*, *11*(3), 185-221. doi:10.1023/A:1015279915874

Caulat, G. (2012). *Virtual leadership: Learning to lead differently*. Faringdon, England: Libri.

Charmaz, K. (2006). *Constructing grounded theory: A practical guide through qualitative analysis*. Thousand Oaks, CA: Sage.

Clark, R. (1983). Reconsidering research on learning from media. *Review of Educational Research*, *53*(4), 445-459. doi:10.3102/00346543053004445

Clawson, J. (2003). *Level three leadership: Getting below the surface* (2nd ed.). Upper Saddle River, NJ: Pearson Education.

Cleary, Y., & Marcus-Quinn, A. (2008). Using a virtual learning environment to manage group projects: A case study. *International Journal of ELearning*, *7*(4), 603-621.

Clutterbuck, D. (2002). How teams learn. T + D, 56(3), 67-69. https://www.td.org/Publications/Magazines/TD

Colfax, R., Santos, A., & Diego, J. (2009). Virtual leadership: A green possibility in critical times but can it really work? *Journal of International Business Research*, *8*(2), 133-138.

Corbin, J., & Strauss, A. (2008). *Basics of qualitative research* (3rd ed.). Thousand Oaks, CA: Sage.

Cradler, J. (2003, April). Technology's impact on teaching and learning: Learning and leading with technology. *International Society for Technology in Education (ISTE*), 54-57.

Creswell, J. (2007). *Qualitative inquiry and research design: Choosing among five approaches* (2nd ed.). Thousand Oaks, CA: Sage.

Cunningham, W., & Cordeiro, P. (2006). *Educational leadership: A problem-based approach* (3rd ed.). New York, NY: Allyn & Bacon.

Curseu, P., Schalk, M., & Wessel, I. (2008). How do virtual teams process information? A literature review and implications for management. *Journal of Managerial Psychology*, *23*(6), 628-652.

Dabbagh, N., & Bannan-Ritland, B. (2005). *Online learning: Concepts, strategies, and application.* Upper Saddle River, NJ: Pearson.

Dani, S., Burns, N., Buckhouse, C., & Kockhar, A. (2006). The implications of organizational culture and trust in the working of virtual teams. *Proceedings of the Institution of Mechanical Engineers*, *220*(B6), 951-959. doi:10.1243/09544054JEM415

Denning, S. (2005). Transformational innovation: A journey by narrative. *Strategy & Leadership, 33*(3), 11-16.

DeRue, S., Nahrgang, J., Wellman, N., & Humphrey, S. (2011). Trait and behavioral theories of leadership: An integration and meta-analytic test of their relative validity. *Personnel Psychology*, 64, pp. 7-52.

Dickey, M. (2003). Teaching in 3D: Pedagogical affordances and constraints of 3D virtual worlds for synchronous distance learning. *International Journal of ELearning*, *24*(1), 105-121.

Drucker, P. (1954). *The practice of management*. New York, NY: Harper.

Edhlund, B. (2008). *NVivo 8 essentials: The ultimate help when you work with qualitative analysis*. Stallarholmen, Sweden: Form & Kunskap AB.

Edwards, B. (2000). Chief executive officer behavior: The catalyst for strategic alignment. *International Journal of Value-Based Management*, *13*(1), pp. 47-54.

Elliot, S. (2006). Technology-enabled innovation industry transformation and the emergence of ambient organizations. *Industry and Innovation*, *13*(2), 209-225. doi:10.1080/13662710600684530

Falkenberg, L., & Herremans, I. (1995). "Ethical behaviors in organizations: directed by the formal or informal systems?", *Journal of Business Ethics*, 14, pp. 133-143.

Frohman, A. (1999). Personal initiative sparks innovation, *Research Technology Management*, *42*(3), 32-38.

Gallup World Headquarters. (2013). *State of the American workplace: Employee engagement insights for U.S. business leaders*. Washington:D.C. Retrieved from http://www.gallup.com/strategicconsulting/163007/state-american-workplace.aspx

Glaser, B. G. (1978). *Theoretical sensitivity: Advances in the methodology of grounded theory*. Mill Valley, CA: Sociology Press.

Glaser, B. G. (1992). *Basics of grounded theory analysis*. Mill Valley, CA: Sociology Press.

Glaser, B. G. (1998). *Doing grounded theory: Issues and discussions*. Mill Valley, CA: Sociology Press.

Glaser, B. G. (2001). *The grounded theory perspective: Conceptualization contrasted with description*. Mill Valley, CA: Sociology Press.

Glaser, B. G. (2002). Conceptualization: On theory and theorizing using grounded theory. *International Journal of Qualitative Methods*, 1(2), 1-31. doi: 10.1.1.120.9345

Glaser, B. G. (2003). *The grounded theory perspective II: Description's remodeling of grounded theory*. Mill Valley, CA: Sociology Press.

Glaser, B. G. (2005). *The grounded theory perspective III: Theoretical coding*. Mill Valley, CA: Sociology Press

Glaser, B. G. (2009). *Jargonizing: Using the grounded theory vocabulary*. Mill Valley, CA: Sociology Press.

Glaser, B. G. (2011). *Getting out of the data: Grounded theory conceptualization*. Mill Valley, CA: Sociology Press.

Glaser, B. G. (2012). *Stop, write: Writing grounded theory*. Mill Valley, CA: Sociology Press.

Glaser, B.G. (2013). *No preconceptions: The grounded theory dictum*. Mill Valley, CA: Sociology Press.

Glaser, B.G. (2014). Memoing: A vital grounded theory procedure. Mill Valley, CA: Sociology Press.

Glaser, B. G., & Strauss, A. L. (1967). *The discovery of grounded theory: Strategies for qualitative research*. New Brunswick, NJ: Aldine Transaction.

Gregg, D. (2007). E-learning agents. *The Learning Organization*, *14*(4), 300-312. doi:10.1108/09696470710749245

Gregor, S., Wassenaar, A., & Marshall, S. (2002). Developing a virtual organization: Serendipity or strategy? *Asian Academy of Management*, *7*(1), 1-19.

Harvard, B., & Xu, J. (2008). Online collaborative learning and communication media. *Journal of Interactive Learning Research, 19*(1), 37-50. Chesapeake, VA: Association for the Advancement of Computing in Education (AACE).

Herremans, I., & Isaac, R. (2005). Management planning and control: Supporting knowledge-intensive organizations. *The Learning Organization*, *12*(4), 313-329. doi:10.1108/09696470510599109

Hoch, J., & Kozlowski, S. (2014). Leading virtual teams: Hierarchical leadership, structural supports, and shared team leadership. *Journal of Applied Psychology*, *99*(3), pp. 390-403.

Holten, J. (2011). The coding process and its challenges. In Glaser, B. G. Glaser, *Getting out of the data: Grounded theory conceptualization* (pp. 150-201). Mill Valley, CA: Sociology Press.

Ikpeze, C. (2007). Small group collaboration in peer-led electronic discourse: An analysis of group dynamics and interactions involving preservice and inservice teachers. *Journal of Technology and Teacher Education*, *15*(3), 383-407.

Kaye, E.M. (2012). *Virtual leader: Game-Changing skills and strategies for the new enterprise manager*. www.VirtualLeaderBook.com: The Association of Virtual Worlds. eISBN 978-1-62154-339-8

Kerfoot, K. (2010). Listening to see: The key to virtual leadership. *Nursing Economics*, *28*(2), 114-118.

Kirkman, B., Benson, R., Gibson, C., Tesluk, P., & McPherson, S. (2002). Five challenges to virtual team success: Lessons from Sabre, Inc. *Academy of Management Executive*, *16*(3), 67-79.

Kolb, D., Prussia, G., & Francoeur, J. (2009). Connectivity and leadership: The influence of online activity on closeness and effectiveness. *Journal of Leadership & Organizational Studies*, *15*(4), 342-352. doi:10.1177/1548051809331503

Kozma, R. (1994). Will media influence learning: Reframing the debate? *Educational Technology Research and Development*, *42*(2), 7-19.

LaPelle, N. (2004). Simplifying qualitative data analysis using general purpose software tools. Preventive and Behavioral Medicine Publications and Presentations, Paper *84*, 1-20. Retrieved from http://scholarship.umassmed.edu/prevbeh_pp/84

Leech, N., & Onwuegbuzie, A. (2007). An array of qualitative data analysis tools: A call for data analysis triangulation. *School Psychology Quarterly*, *22*(4), 557.

Lester, D., & Parnell, J. (2002). Aligning factors for successful organizational renewal. Leadership & Organization Development Journal, *23*(1/2), 60. doi: 10.1108/01437730210419189

Li, Y., Dong, M., & Huang, R. (2009). Toward a semantic forum for active collaborative learning. *Educational Technology & Society*, *12*(4), 71-86.

Liarokapis, F. (2007). An augmented reality interface for visualizing and interacting with virtual content. *Virtual Reality*, *11*, 23-43. doi:10.1007/s10055-006-0055-1

Lightner, S., Bober, M., & Willi, C. (2007). Team-based activities to promote engaged learning. *College Teaching*, *55*(1), 5-19.

Lin, L., & Lu, I. (2005). Adoption of virtual organization by Taiwanese electronics firms: An empirical study of organization structure innovation. *Journal of Organizational Change Management*, *18*(2), 184-200.

Lippitt, R., Watson, J., & Westley, B. (1958). *The dynamics of planned change*. New York, NY: Harcourt, Brace & World.

Lu, L., & Yeh, C. (2008). Collaborative e-learning using semantic course blog. *Journal of Distance Education Technologies*, *6*(3), 85-95.

Lunenburg, F. (2010). Managing change: The role of the change agent. *International Journal of Management, Business, and Administration*, *12*(1), 1-6.

Magnussen, L. (2006). Applying the principles of significant learning in the e-learning environment. *Journal of Nursing Education*, *47*(2), 82-86.

Majchrak, A., Malhotra, A., & John, R. (2005). Perceived individual collaboration know-how development through information technology-enabled contextualization: Evidence from distributed teams. *Information Systems Research*, *16*(1), 9-27. doi:10.1287/isre.1050.0044

Marshall, P., McKay, J., & Young, J. (2007). Structure, strategy, and success factors for the virtual organization. In S. Barnes (Ed.), *E-Commerce and V-Business: Digital enterprise in the twenty-first century* (2nd ed.), 219-314. San Francisco, CA: Elsevier.

Martin, V., & Gynnild, A. (Eds.). (2011). *Grounded theory: The philosophy, method, and work of Barney Glaser*. Boca Raton, FL: Brown Walker Press.

McCallin, A. (2009). Which grounded theory? *Grounded Theory Online; Supporting GT Researchers.* Retrieved from http://www.groundedtheoryonline.com/what-is-grounded-theory/classic-grounded-theory

McKeown, B., & Thomas, D. (1988). *Q Methodology*. Retrieved from Newbury Park, CA: Sage.

Microsoft Office Word (2014) [Computer software]. Redmond, WA:Microsoft Corporation. Retrieved from http://office.microsoft.com/en-us/word/

Mowday, R., Porter, L., & Steer, R. (1982). *Employees organization linkages*. New York, NY: Academic Press.

Morse, J., Stern, P., Corbin, J., Bowers, B., Charmaz, K., & Clark, A. (2009). *Developing grounded theory: The second generation*. Walnut Creek, CA: Left Coast Press.

Mowshowitz, A. (1994). Virtual organization: A vision of management in the information age. *The Information Society*, *10*(4), 267-288. doi:10.1080/01972243.1994.9960172

Mowshowitz, A. (2002). *Virtual organization: Toward a theory of societal transformation stimulated by information technology*. Westport, CT: Greenwood Publishing Group.

Pal, R., & Torstensson, H. (2011). Aligning critical success factors to organizational design: A study of Swedish textile and clothing firms. *Business Process Management Journal*, *17*(3), pp. 403-436. doi: 10.1108/14637151111136351

Parchoma, G. (2005). Roles and relationships in virtual environments: A model for adult distance educators extrapolated from leadership in experiences in virtual organizations. *International Journal of ELearning*, *4*(4), 463-487.

Patton, M. (2002). *Qualitative research & evaluation methods* (3rd ed.). Thousand Oaks, CA: Sage.

Power, C. (2007). Educational research, policy, and practice in an era of globalisation. *Education Research Policy Practice*, *6*, 87-100. doi:10.1007/s10671-007-9016-z

QSR International. NVivo 8. Retrieved from http://www.qsrinternational.com/solutions_multimedia.aspx

Randal, C., & Riegel, D. (1995). The multidimensional view of commitment and the theory of reasoned action: A comparative evaluation. *Journal of Management*, *21*, 617-638.

Riemer, K., & Klein, S. (2007). Is the V-form the next generation organization? An analysis of challenges, pitfalls, and remedies of ICT-enabled virtual organisations based on social capital theory. *Journal of Information Technology*, 147-162. doi:10.1057/palgrave.jit.2000120

Robbins, S. (2002). *The evolution of the learning content management system*. Retrieved from http://www.learningcircuits.org/2002/apr2002/robbins.html

Roderick. C. (2010). Comodifying self: A grounded theory study. *The Grounded Theory Review*, *9*(1), 41-64.

Rybariczyk, B. (2007). Tools of engagement: Using case studies in synchronous distance-learning environments. *Journal of College Science Teaching, 37*(1), 31-34.

Salancik, G. (1977). *Commitment and the control of organizational behavior and belief.* In B. Staw and G. Salancik (Eds.), New directions in organizational behavior (pp. 1-54). Chicago, IL: St. Clair Press.

Saldana, J. (2011). *The coding manual for qualitative researchers*. Thousand Oaks, CA: Sage.

Salmons, J. (2005). *Project demonstrating excellence: Taxonomy of collaborative e-learning* (Doctoral dissertation). Available from ProQuest Dissertations database.

Schalk, R., & Curseu, P. (2010). Cooperation in organizations. *Journal of Managerial Psychology*, *25*(5), 453-459.

Scharmer, C. O. (2007). *Theory U: Leading from the future as it emerges*. Cambridge, MA: The Society for Organizational Learning, Inc. (SoL).

Schein, E. H. (2004). *Organizational culture and leadership* (3rd ed.). San Francisco, CA: Jossey-Bass.

Schippers, M., Hartog, D. Koopman, P., & van Knippenberg, D. (2008). The role of transformational leadership in enhancing team reflexivity. *Human Relations*, *61*(11), 1593-1616.

Scott, H. M. (2007). *The temporal integration of connected study into a structured life: A grounded theory* (Doctoral dissertation, University of Portsmouth, UK). Retrieved from http://www.groundedtheoryonline.com/who-we-are/helen-scott

Senge, P. (2010). *The necessary revolution: Working together to create a sustainable world*. New York, NY: Random House.

Sheridan, K. (2012). *The virtual manager*. Pompton Plains, NJ: Career Press.

Simmons, O. (2008). *What is grounded theory*? Retrieved from http://www.groundedtheoryonline.com/what-is-gt.aspx

Simmons, O. (2009). Grounded theory guidelines for IRB reviewers at Fielding Graduate University. Retrieved from http://www.groundedtheoryonline.com/getting-started/ethical-review-irb

Sitek, P., Seifert, M., & Klaus-Dieter, T. (2010). Towards an interorganizational perspective for managing quality in virtual organisations. *The International Journal of Quality & Reliability Management*, *27*(2), 231-246.

Smith, L. (2006). Best practices in distance education. *Distance Learning*, *3*(3*)*, 56-63.

Stebbins, L. (2010). Development of reality system theory. *Journal of Business & Economics Research*, *8*(4), 1-22.

Stegall, M. (2003). Running like a bottled tornado. *Quality Progress*, *36*(1), 45-50.

Stephenson, W. (1953). *The study of behavior: Q-technique and its methodology*. Chicago, IL: University of Chicago Press.

Strauss, A., & Corbin, J. (1998). *Basics of qualitative research: Grounded theory procedures and techniques* (2nd ed.). Thousand Oaks, CA: Sage.

The Dissertation Guidebook: Walden University. (2010), 1-44. Retrieved from http://catalog.waldenu.edu/mime/media/7/830/Diss_GBook_Final_9_27_10.pdf& print

Tichy, N. M., & Devanna, M. A. (1990). *The transformational leader: The key to global competitiveness* (2nd ed.). New York, NY: John Wiley & Sons.

Tompkins, C., & Weinreich, D. (2007). Collaborating, teaching, and learning in a cyberspace community: A virtual age experience. *Journal of Gerontological Social Work*, *50*(1/2), 119-134.

Tseng, T., Ku, H., Chien-Hsin, W., & Sun, L. (2009). Key factors in online collaboration and their relationship to teamwork satisfaction. *The Quarterly Review of Distance Education*, *10*(2), 185-206.

Tubin, D. (2007). When ICT meets schools: Differentiation, complexity, and adaptability. *Journal of Educational Administration*, *45*(1), 8-32. doi:10.1108/09578230710722430

Vakola, M., & Wilson, I. (2004). The challenge of virtual organizations: Critical success factors in dealing with constant change. *Team Performance Management*, *10*(5/6), 112-120. doi:10.1108/13527590410556836

van der Hoven, C., Probert, D., Phaal, R., & Goffin, K. (2012). Dynamic technology leadership: The adaptive role of the CTO. *Research-Technology Management*, September-October, pp. 24-33.

Verstegen, D., Barnard, Y., & Pilot, A. (2008). Instructional design by novice designers: Two empirical studies. *Journal of Interactive Learning Research*, *19*(2), 351-383.

White, B. (1980). "Internal control practices: Formality, informality, and effectiveness". *Internal Control in US Corporations*, Financial Executives Research Foundation, New York, NY, pp. 337-344.

Widmer, P., Schippers, M., & West, M. (2009). Recent developments in reflexivity research: A review. *Psychology of Everyday Activity*, *2*(2), 1-11.

Williams, V. (2002). *Virtual leadership*. Edison, NJ: Shadowbrook .

Wright, P. (2005). Integrated e-learning: Implications for pedagogy, technology, & organization. *Canadian Journal of Education*, *28*(1), 227-228.

Yang, S. (2006). Context aware ubiquitous learning environments for peer-to-peer collaborative learning. *Educational Technology & Society*, *9*(1), 188-201.

Yin, R. (2011). *Qualitative research from start to finish*. New York: NY: The Guilford Press.

Yukl, G. (2006). *Leadership in organizations* (6th ed.). Upper Saddle River, NJ: Pearson.

Zamfir, G. (2009). "Learning e-learning." *Informatica Economica*, *13*(4), 51-62.

Zamfir, G. (2012). Concepts map approach in e-classroom. *Informatica Economica*, *16*(3), 124-135.

Appendix A: Sample Consent Form

CONSENT FORM

You are invited to take part in a research study of Virtual Leadership. This study will pursue an exploration of virtual leadership leading to a theory that will inform practice and advance the phenomenon of virtual leadership The researcher is inviting leaders of successful and innovative virtual organizations to be in the study. This form is part of a process called "informed consent" to allow you to understand this study before deciding whether to take part.

This study is being conducted by a researcher named Linda Schurch, who is a doctoral student (PhD) at Walden University.

Background Information:

Present literature research on virtual leadership is nearly non-existent and supports the identification of an existing gap on the topic of virtual leadership. The limited research on virtual leadership, as compared to research on virtual learning, the role of technology in learning and collaborative problem solving, knowledge sharing, virtual learning teams that work, virtual teams and implications for leadership, and leadership effectiveness in global teams, establishes the need for research. This study will result in an emergent theory on virtual leadership.

Procedures:

If you agree to be in this study, you will be asked to:

- Arrange an interview time of approximately 1-1.5 hours using synchronous or asynchronous methods such as VoIP (Voice over Internet Protocols), e-mail, or phone.
- Answer two initial open-ended questions and respond to subsequent probes to further elaborate your responses for selected areas.
- *If analysis indicates*, arrange one or two additional follow-up interviews that will result in further responses to open-ended questions that deepen the previous response levels.

Here are some sample questions:

1. What are the issues that virtual leaders face?
2. How are these issues resolved?
3. For follow-up interview (if applicable): Regarding your conversation/statement on the topic of _____, can you further reflect on how _____?
4. Note: this follow-up activity *may be* completed in the form of written questions.

- *If it is determined that further information would be helpful, following the initial interview,* arrange for the acquisition of additional participant data. Additional data may include:

  Reflective journals/logs/diaries (elicited)

  You would be asked to respond to the following journal prompt and share the response with the researcher within one week: this activity may take between 1-2 hours to complete

  1. Visualize and describe what a successful day looks like in virtual working and virtual leading.
  2. What processes work and what hinders the above?

  Historical records (extant/already available)

  Historical records *may include* incorporation documents of an organization, minutes to early meetings that took place in the organization (when the organization first started) that give information on how problems were solved, what was considered priority, and immediate/future organizational direction.

  Organizational documents such as policies (extant/already available)

  If used, organizational policies will include topics such as employee conduct, interagency agreement and partnership policies (or Memorandum of Understanding samples), and policies/protocols regarding distributed team development.

Correspondence (extant/already available)

Sample correspondence data *could include* letters from consumers, satisfaction surveys conducted that show what the strengths/weaknesses of the organization have been, and resulting organizational response (such as an open letter to consumers or partnering companies explaining the vision/mission of the organization). All extant correspondence used will only include data that is considered public information provided by consumers for the expressed purpose of giving public feedback regarding the organization. All satisfaction surveys used will be those in which prior permission has been granted [by the consumer] to publish the results of the survey.

Internet discussions (extant/already available)

An *example* of an internet discussion might include a previous e-mail dialogue between various leaders within the organization discussing a new protocol, innovative idea, or strategy to improve the effectiveness of the virtual organization.

This study will only involve data (internet discussions among and between organizational leaders) that are considered public information by the organization. No private e-mails or any other data considered private will be used in this study.

Recorded Voice over Internet Protocol (VoIP) sessions (extant/already available)

An *example* of a VoIP recorded session that may be used might include a mentoring session with growing leaders in the company (or new leaders), which would show leadership development strategies, authentic practice, and leadership planning initiatives within the organization.

This study will only involve data (Recorded Voice over Internet Protocol [VoIP] sessions) among and between organizational leaders, which are considered public information by the organization. No private recorded sessions or any other data considered private will be used in this study.

Mass media communications (extant/already available)

This *could include* TV advertising clips, brochures, internet videos, digital news releases, etc. that demonstrate the virtual organizations growth trends, vision, mission, goals, and service strategies.

- The participant may spend minutes up to two hours accessing extant/existing data
- The above identified *further information* (data) and activities included are the only additional data that will be used in this study. There are no other activities that would be asked of participants other than the above listed and only as described (fully voluntary, data that is considered public and only the examples listed).

Voluntary Nature of the Study:

This study is voluntary. Everyone will respect your decision of whether or not you choose to be in the study. No one at Walden University will treat you differently if you decide not to be in the study. If you decide to join the study now, you can still change your mind during or after the study. You may stop at any time. Further, any information beyond the initial interview (listed above) will only be used when supported by you, the participant. All data sources will only be used when given voluntarily without hesitation.

Risks and Benefits of Being in the Study:

Being in this type of study involves some risk of the minor discomforts that can be encountered in daily life, such as potential stress, anxiety, or becoming upset with your voluntary response content. Being in this study will not pose risk to your safety or wellbeing.

Significant benefits and implications of this study include:

- Financial and training variables for new virtual leaders can be effectively explored
- Assurances for effective future performance outcomes for organizations who participate in virtual leadership training
- Through the identification of a theory grounded in data, a core category with an integrated set of hypotheses within the topic of virtual leadership will contribute to the body of knowledge regarding the core category
- Further exploration and inquiry into targeted aspects of virtual leadership will enable researchers to transcend traditional leadership categories

Payment:

While there is no monetary payment for participating in this research study, your involvement in the study will significantly contribute to the body of knowledge regarding the phenomenon of virtual leadership.

Privacy:

Any information you provide will be kept confidential. The researcher will not use your personal information for any purposes outside of this research project. Also, the researcher will not include your name or anything else that could identify you in the study reports. All field notes and interview transcripts will be kept under lock and key in two different locations, using secure protocol and accessible only to me, the researcher. The researcher will maintain all raw data including interview recordings, spread sheets, documents, observations, pictures, etc., for no less than five years upon completion of the researcher's dissertation, according to the protocol set forth in the Walden University's Institutional Review Board (IRB) requirements ("The Dissertation Guidebook," 2010, p. 10). At this time all data will be destroyed using best practice protocol for media destruction.

The Dissertation Guidebook: Walden University. (2010), 1-44. Retrieved from http://catalog.waldenu.edu/mime/media/7/830/Diss_GBook_Final_9_27_10.pdf&print

Contacts and Questions:

You may ask any questions you have now. Or if you have questions later, you may contact the researcher via e-mail:

[redacted]

Mobile phone:

[redacted]

If you want to talk privately about your rights as a participant, you can call Dr. Leilani Endicott. She is the Walden University representative who can discuss this with you.

Her phone number is 1-800-925-3368, extension 1210.

Walden University's approval number for this study is #06-19-13-0152918
Expiration Date: June 18, 2014.

- Please print or save this consent form for your records.

Statement of Consent:

I have read the above information and I feel I understand the study well enough to make a decision about my involvement. By replying *to this e-mail with the words, "I consent," I understand that I am agreeing to the terms described above.*

Appendix B: Interview Protocol

Interview Protocol

Virtual Leadership: A Grounded Theory Study

1. What do you feel about your experience as a virtual leader?

2. What are the issues for you when working virtually?

3. How did you/do you resolve those issues?

4. Visualize and describe what a successful day looks like in virtual working and virtual leading.

5. What else should I know, that I haven't asked?

6. What is your role in the virtual organization?

Appendix C: Initial Coding Categories and Codes

Virtual Culture

- Positions
- Processes
- Collaboration
- Celebrations
- Robust relationship building
- Nemesis (depersonalization)
- Underground phenomenon
- Strong core values
- Sub categories: dynamics/under the table communication

Isolation

- 24/7 VL life never ends (no beginning and no end… time is not my own; trapped)
- Online tapping
- Ruins balance
- Misunderstood
- Global responsibility
- E-mail volume
- Expectations of productivity
- Respect for boundaries: self and others

Technology

- Augments communication (virtual water cooler to exchange ideas)
- Invest in ‘right’ technologies, not the ‘hot’ technologies (effective virtual tools)
- Old technologies are a hindrance
- Effective use of technology
- absent... non-engaging...missing

Time Management

- Meeting rhythm
- Prioritization: time allocation
- Tactical planning
- Information flow (upward and downward)
- Clarity
- Accountability
- Making time to work
- Reflection
- Typical leveraging not possible in virtual world

Virtual Conflict

- Perception of people as flat
- Disconnect between marketed virtual leadership and reality of virtual leadership
- Virtual bonding
- Time-zone complexities

- Organizational alignment
- Trust (virtual cubical walls)
- Behavioral sensitivity
- Reactive leadership as a result of interruptions/distractions (time management)
- Capacity for mindfulness undermined by expectations of instant responding
- Underground conflict undermines VL as effective leader: underground phenomenon
- Many individuals are on several 'VL teams': overextension

Collaboration

- Share decision-making process
- Organizational huddles/teleconferences

Execution Management

- Cost-benefit analysis of virtual teams
- Follow up and proactive planning
- Presence and flexibility
- E-recognition
- Get right people in right positions
- 24/7 customer service
- Effective processes for VL (positions...planning...collaboration)
- Deliverables/Performance
- Clarity through contracts

Training

- Relationship building across boarders
- Effective use of technology
- Hybrid leader fatal flaws (target collocated vs. virtual)
- Modeling: skill sets/attitude/work habits/collaborative ‘’style’’
- Soft skills for conflict management

Appendix D: Final Core Category, Subcategories, Structural Conditions, Properties, and Dimensions of Properties

Core Category: Seducing Engagement

Subcategories

1. Building Virtual Culture Capacity
2. Virtual Leadership (VL) Aligning

Structural Conditions

1. Driving Technology

Properties

a. Technology Tug-of-War

Dimensions

- ideal vs. real
- technology alignment (purpose/goals of organization, virtual teams, consumers, technology formation)
- flexibility (balance)

b. Virtual Water Cooler

Dimensions

- cool, warm, filled
- telepresence: emerging, mechanical, skilled

c. Aligning V-Etiquette

Dimensions

- training virtual users

- job skills

2. Time

Properties

a. Zones

b. 24/7 Phenomenon

Appendix E: Sample Coded Interview

1. What do you feel about your experience as a virtual leader?	
For the most part, it has been *a positive experience*, although I	Supporting VL
really do *miss the personal interaction* of working in a co-located	Missing f2f interaction (later coded as Building virtual culture capacity)
environment (I certainly *do not prefer it to live*, face-to-face	Live dialogue preferencing
leadership!). It can be very frustrating at times as my team	
members are located in *several different time zones*, and it is nearly	Time
impossible to have 'live' dialog with some of them.	Live dialogue preferencing
2. What are the issues for you when working virtually?	
a. Because our BPCs are in *numerous time zones* and are	Time
frequently on customer engagements (they have a 75%	Time
billable target), it is nearly impossible to get them all	Engaging issues
together for our weekly team meetings.	
b. It's very *challenging to get good conversation/discussion*	Building communication (later coded as Building virtual culture capacity)
going during our team meetings. *Sometimes I find myself*	Live dialogue preferencing (later coded as seducing negotiation)
doing too much of the talking.	

c, *Without the ability to read body language, it's difficult to*	Technology tug-of-war
get a good read on how the messages are coming across,	
whether there is confusion or misunderstanding, or if	
someone might have something to interject. Because virtual	
team members are not in a collocated location, it is often	
difficult for the virtual team leader and virtual team	Technology tug-of-war
members to understand what other team members are	
doing. The virtual team leader cannot walk into a cubicle to	
see a team member working on a project, coding a new	
application, or working side-by-side with a customer. The	
lack of visibility makes trust and dependability highly	Building virtual culture capacity (trust)
critical within a virtual team.	
d. It's easy to lose touch with team members if they are not	Losing touch (in vivo)
attending meetings or engaging in e-mails/phone calls with	Engaging issues
me.	
e. Lack of spontaneity; inability to quickly 'check in',	Technology tug-of-war
brainstorm, etc. with team members.	

3. How did you/do you resolve those issues?	
a. I send out the meeting agenda beforehand so those who are	Seducing Negotiation
not able to attend can get an idea of what we will be	
discussing. I also record all of our meetings and send an	Seducing Negotiation
e-mail to everyone after the meetings with a link to the	
recording as well as a summary of the key points that were	
discussed, any decisions that were made, and any follow-up	
actions that need to be taken. I take great care to ensure	Seducing Negotiation
that our shared repository (Box) of collateral is complete	
and up-to-date. The BPC team is relatively new (less than 2	
years) and I was able to bring them all together in the same	Hybridizing
location for a 3-day 'summit' early this year and am trying	
to get approval to this again in early 2014. In addition to	
being able to get a lot of work done together, this was	Hybridizing
tremendously valuable in creating stronger relationships	Building virtual culture capacity
among the team members.	
b. I try to ask several open-ended questions during the	
meetings and also try to remember to pause frequently so	Aligning V-Etiquette
others have a chance to speak. I also track the participants	Aligning V-Etiquette
on the Webex console so I can see who is muted or not. I	
sometimes will ask a specific individual for their	
input/feedback, if I suspect that they are 'multi-tasking' and	Seducing engagement

not fully engaged.	
c. In addition to the items mentioned in b. above, I also use	
'private chat' to reach out to specific individuals during the	Driving Technology/Seducing Engagement
meeting.	
d. This is an issue that I still haven't resolved to my	Seducing engagement
satisfaction [not attending meetings], but I try to establish a	
personal relationship with each of the BPCs. Sometimes	Building virtual culture capacity: recognition
this happens as a result of us attending the same corporate	
events. But often times it happens through 1-on-1 phone	Building virtual culture capacity: recognition
conversations. I also make a point of giving team members	
recognition during our team meetings or via e-mail when I	Building virtual culture capacity: recognition
am aware of something special that they have done or are	
working on. I also make a point of thanking them for all of	Building virtual culture capacity: recognition
their input/contribution, regardless of how I receive it	
(e-mail, Skype chat, or phone call). I believe that they will	
be more engaged if they believe their involvement is	Seducing negotiation (later coded as Seducing engagement)
appreciated.	
e. This is still an issue for me. I don't know if it can	

be	
resolved in a virtual working environment. To me, this is	
the biggest drawback of virtual leadership [virtual check-	Technology tug-of-war: Virtual water cooler
ins].	
4. Visualize and describe what a successful day looks like in	
virtual working and virtual leading.	
Virtual work requires a pretty strict adherence to the calendar.	Seducing negotiation
Nearly all 'live' conversations that I have with others are	Seducing negotiation
'*scheduled',* so a successful day of working with other people	
consists of lots of Webex meetings or phone calls! On the rare	Driving technology
occasion that I am working extensively with someone else, we tend	
to Skype chat a lot…it's easy to do, fairly non-disruptive, and easy	Virtual Water Cooler
to end quickly, unlike phone calls.	
5. What else should I know, that I haven't asked?	
Tools used are WebEx, e-mail, Skype and phone. One thing that we	
have not used is video technology. While I could use this during a	Technology tug-of-war
1-on-1 Skype call, no one really wants to do this. However, I do	VL Aligning
think that it would be good to have a video-conferencing tool (ex.	
Movi), but *my organization does not have one.* We do have Live	
Feed, and while I have created a Live Feed group for the BPCs to	Driving Technology
follow, I tend to forget about it and think that others do as well.	Technology tug-of-war: technology alignment

6. What is your role in the virtual organization?	
I am the 'team lead' for a group of business process consultants	
(BPCs) who are located in various countries. Although the BPCs	
do not 'report' to me, I am responsible for developing the	
methodology and collateral that they use in the execution of their	
role on customer engagements. I am responsible for their training	
and the evaluation of the quality of their work. As a member of	
the Global Program Office, I am responsible for developing and	
supporting all of our process-related professional service offerings	
and ensuring that the BPCs are equipped and enabled to deliver	
these services.	

Appendix F: Memo Samples

Seducing Negotiation (later renamed: Seducing Engagement)

12-29-13

I have experienced a near epiphany today following the coding completion of two more interviews and the concentrated 're-read' of Dr. Barney's book, Theoretical Sensitivity (chapters on sampling/coding/memos). I am sensing (yes, this is a multisensory experience... grounded theory process) the integration of my data thus far, with a particular code that is showing itself... with related properties and dimensions. That said, I want to be most careful in not moving on this epiphany... but assimilating it as greater knowledge of what I am doing.

The code: *seducing negotiation* (memo will be created next)

12-29-13

Leading virtual is not preferred, but most necessary, based on the way of the future of our highly interconnected global world [in vivo, Participant 7]. Live interaction is preferred and *the virtual leader must go to nearly any length* to assure engagement, understanding, perception/stakeholder buy-in, and effective results for the company. Seduction comes in the form of *resource gifting (getting gold* [nvivo], Participant 7), communication coaching, and exponential effort in cultivating multidimensional commitment of virtual workers to grow the success of an innovative organization.

Seducing negotiation requires the virtual leader to give their full attention, creativity (enlightening solutions), as they become *paradigm shifters*. This paradigm shifting occurs 'in the moment' with the speed of change in the technology world. There is a

continual battle/ebb & flow/tug-of-war in creating a virtual culture that is not forcing the generic culture to 'look-feel-respond' the same as a brick and mortar organization.

7-15-14

What do virtual leaders do to address their main concern, which is cultivating the success of the worker/learner/team member?

virtual leaders *build a culture for virtual working through and with effective technology.*

- *technology* is the tool that seduces (technology is seductive)

They incorporate the organization's vision and values into this culture. Using flexibility with technology, the virtual leader uses 'presencing' as a critical methodology for building the virtual culture (trust/relationship building/virtual working skills-technology/conflict resolution/communication).

Multitasking Rituals

12-1-13

Technology spurs *multitasking rituals* and creates avenues for efficiency, information management, and auto responders. Every virtual leader has developed their set of task management interventions, most, if not all, involve tech tools. Technology use is inherent in virtual leadership time management. Where and how do VLs keep pace with technology changes that occur at lightning speed?

Appendix G: Sample Participant Response Indicators to Codes

Code: Seducing Engagement

Participant Response Indicators: Participant noted as 'P'

- P7:..a well run virtual team should have a clear understanding of the team's expectations already... this is the responsibility of the virtual leader...bringing all workers to full engagement.
- P11... the biggest problem in virtual leading is the need to engage both team members and other workers... senior, peer, and junior... and perhaps even outside the organisation without being present with the others at the same time, face-to-face.
- P68...engagement is another issue for me; I am accountable for my students [virtual higher ed] and cannot determine proper interventions needed ... I have created many *work arounds* to ensure my students have all they need to effectively engage...
- P 4... it is easy to lose touch with team members if they are not attending meetings or engaging in e-mails/phone calls, etc.
- P46... engaging the unresponsive worker and ensuring their successful performance is the priority burden I hold in my virtual leadership role today...
- P37... poor engagement is a constant disruption and takes much time/energy/resources to ensure minimal engagement...

- P16... I strive to provide what is '*golden*' including the creation of early, mid-point and after the end of the project feedback sessions... I create links between deliverables and personal development for each individual on the project; this is linked to performance and rewards.
- P 60... the main issue that I have encountered in my virtual leadership position is engagement with students [online university]

Code: Building Virtual Culture Capacity

Participant Response Indicators:

- P16... we celebrate success and team members contribute to what they want to celebrate
- P11...thoughtful virtual leadership must include relationship building across borders ...
- P1...By far, a killer issue of virtual leadership is conflict resolution..many VL's have no clue that conflict goes underground and undermines effectiveness
- P6...recognition is a meaningful way to build trust, create atmosphere of oneness, and reinforce skill sets. Each week I try to send at least three team members some form of recognition for work accomplished, teamwork, or other praise
- P12... culture of collaboration includes mutual respect and plays into virtual leadership.

- P13... within the consideration of conflict resolution factors in virtual organizations, there is a decreased perception about people; they are seen/viewed as 'flat', like names on a paper. The perception is that people have no style... in reality, the reverse is true. Authentic awareness and recognition that people DO have a personal style must happen to deal with any behavioral issue. Virtual leaders need to understand that there is great creativity in virtual cultures.

Code: VL Aligning

Participant Response Indicators:

- P4... one thing we have not used is video technology. I think it would be good to have a video conferencing tool such as Movi, however, my organization does not have a video conferencing tool.
- P6... it is detrimental to virtual teams if the methods and technologies needed are not supported by the culture and policies of the organization...
- P5...ensure top down support for virtual team leaders and virtual team members... make sure organizational policies support virtual team leaders and virtual team members...
- P77...sustainability, consumer experience, and compliance have impact on corporations decision making on technology considerations...how do we support the consultant (virtual worker-leader) experience and maintain the corporate/industry standards?
- P13...the biggest thing is making sure that the information flow is both up and down in the organization...

Code: Technology Tug-of-War

Participant Response Indicators:

- P9... I always seem to be missing parts in the technology that would allow me to achieve what I really want...
- P13... insufficient resources utilized for technology and equipment for virtual workers hinders effective virtual leadership. Lack of good process maps for each position aligned with the company vision is critical....
- P44... the major issue I have working virtually is the number of problems we have with technology...
- P24...the inability to read non-verbals and also provide those reassurances is an obstacle [technology reliability issues]...
- P68... my learning content management system is a challenge for me... it does not allow as much flexibility as needed for workers and learners...

Code: Virtual Water Cooler

Participant Response Indicators:

- P6... virtual team members use technology to create a side-by-side work environment ... brainstorming takes place using a virtual whiteboard, and water cooler conversations are more than likely a Microsoft Link or other quick method of communication....
- P1...there is a virtual channel to discuss difficult issues...
- P14...there is a difference with distributed workers and collocated workers... in collocated workers, they are physically able to 'see' those leaving, those assuming

new positions, and have water cooler conversations regarding what they have heard at the main office...

- P11...using technology appropriately supports building relationships across borders and is the portal for water cooler conversations....

Code: Aligning V-Etiquette

Participant Response Indicators:

- P2...what hinders...the need to control people, not knowing when to use asynchronous as opposed to synchronous communication...
- P1...individuals are clear on work assignments; they have a "buddy" in case they are unable to make meetings/deliver on assignments, etc. Virtual working skills/training are either completely missing or unevenly distributed...
- P4...also try to remember to pause frequently so others have a chance to speak... I also track the participants on the WebEx console so I can see who is muted or not...
- P40...technology tools and training given spur meaningful connection... I change-up the speed [slow down and gear up] of my communication, based on the varying levels of support needed

Code: Time Zones

Participant Response Indicators:

- P4... it can be very frustrating at times as my team members are located in several different time zones... it is nearly impossible to have synchronous dialogue with

some of them... and nearly impossible to get them all together for our weekly team meetings.

- P76...one issue for me in a university online setting is coordinating synchronous activities and giving timely feedback with students and colleagues in many time zones... including people around the world...
- P75...the three biggest issues are maintaining effective regular communication, hiccups with technology, and time zones...
- P5...time zone differences limit the time when I can get all of the team together... Evaluate time zone differences and collaborate with the team to determine the best approaches to managing/leading... this may mean some start earlier or later... a follow-the-sun approach, where work is turned over and the end of one team member's day to another team member just starting...

Code: 24/7 Phenomenon

Participant Response Indicators:

- P37... I struggle with lack of time to complete my own ideas/projects and deliverables for my team...technology does not permit a 'shut-down' time for me...
- P50... I personally have an issue with being able to leave my work behind for the day... within minutes, I can enter my home office and have my colleague's attention to address work related items... there is some advantage to being able to walk away from a physical building at the end of the day and not returning until the morning...

- P13... the 24/7 nature of virtual leadership and teams makes it difficult to separate work and non work. Even in the evenings and weekends people feel they can tap you online [in vivo... online tapping]...
- P12...always being "on duty" and available...

Curriculum Vitae

Linda Schurch

E-Mail: lschurchis@hotmail.com

Executive Profile

Ambitious Senior Director who creates strategic alliances with organization leaders to effectively align with and support key business initiatives. Builds and retains high performance teams by hiring, developing and motivating skilled professionals.

Skill Highlights

- Leadership/communication skills
- Product development
- Problem resolution
- Committed to cultivating staff leadership
- Self-motivated
- Customer-oriented
- Innovative thinker
- Natural leader

Core Accomplishments

- Spearheaded company-wide accreditation endeavors
- Transformed special education departments showcasing best practices and student outcome
- Recipient: Kathy Shelby Leadership Award for Outstanding Special Education Leader in Ohio 2012, Nominee

Professional Experience

January 2005 to Current

ECOT Columbus, OH

Senior Director, School Improvement and Intervention Services

- Directs all program and business aspects of Intervention and School Improvement.
- Assures Compliance with applicable laws and grant guides.
- Manages the day-to-day tactical and long-term strategic activities within the business.
- Capitalizes on industry changes to maximize company revenue.

September 2012 to Current
Consulting , OH
Executive Coaching

- Personal executive coaching
- Performance Plans
- Leadership development

Education

2014 Walden University Minneapolis, MN
Doctor of Philosophy, Education

- GPA 3.9
- Dissertation Topic:
  Seducing Engagement: A Classic Grounded Theory Study on Virtual Leadership
- Kappa Delta Pi Honor Society
- Dean's Student Advisory Council, Walden University

1986 Ohio State University Columbus, OH
Master of Science, Administration

- GPA: 3.9
- 1982 Ohio State University
- Bachelor of Science, Special Education
- Graduated Summa Cum Laude

Licensure

- Superintendent
- Administrative Specialist
  Curriculum, Instruction and Professional Development
- Principal
  Principal Grades 4-9
  Principal Grades 5-13
  Principal Grades PK-6
- Supervisor
- Education of the Handicapped (K-12)
  Developmentally Handicapped
  MSPR/MH
  Multihandicapped
  Orthopedically Handicapped
  Severe Behavior Handicapped
  Specific Learning Disabled