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How the Alignment of an Organization's Communication Methods and a Remote Employee's Learning Style Impact the Effectiveness of the Remote Worker: A Positivistic Case Study

A DISSERTATION

SUBMITTED TO THE FACULTY OF THE SCHOOL OF EDUCATION

OF THE UNIVERSITY OF ST. THOMAS

By

Amy L. Jauman

IN PARTIAL FULFILLMENT OF THE REQUIREMENTS

FOR THE DEGREE OF

DOCTOR OF EDUCATION

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UNIVERSITY OF ST. THOMAS

We certify that we have read this dissertation and approved it as adequate in scope and quality for the degree of Doctor of Education and hereby approve the dissertation. We have found that it is complete and satisfactory in all respects, and that any and all revisions required by the final examining committee have been made.

Dissertation Committee

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James Brown, Ph.D., Committee Member

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ABSTRACT

An increasing number of organizations are employing remote workers because of the cost and hiring benefits for the organization as well as the appeal to the worker. Remote workers are being drawn to the remote environment because of the increased flexibility it offers. As this unique work force grows, consideration has to be given to the best ways to communicate with and provide learning opportunities for remote workers. There is a natural tendency to believe technology is the primary key to success for a remote work force, however emerging research is showing the human element is equally important. I found that a remote worker's learning style, the communication vehicle, and communication content are three key elements that contribute to a remote worker's effectiveness and job satisfaction. Additionally, I discovered remote workers make adaptations in their own environment as individuals or as teams in an attempt to increase effectiveness.

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Background

Statement of the Problem

Organizations across industries and all over the world are increasing their number of remote employees (Staples, Hulland & Higgins, 2006). Some of the most widely discussed advantages for the organization include employee performance improvement and increased commitment to the organization (Hunton & Norman, 2010). Additional incentives to capitalize on remote work include decreases in overhead and an increase in hiring options. According to Davenport and Pearlson (1998), managers are increasingly using the new remote technologies available to increase interaction between salespeople and customers.

Advantages associated with organizations employing remote workers extend beyond employee and organization interaction. The decline of the world's physical infrastructure and the inability to preserve our environment is another frequently referenced challenge alleviated by people working remotely. Offstein and Morwick (2009) stated "Our roads, highways, and airports are over-used and under-maintained. We simply cannot afford to rely on our physical infrastructure for even the most basic need-to get to work" (p. XVII).

Historically, organizations may have shied away from hiring remote employees for two primary reasons. The first concern was often whether or not an employee could stay "connected" to the organization if they are not part of a collocated work group. The second common concern was whether or not a worker operating outside of a traditional

work environment would be productive for the full forty-hour work week (Davenport & Pearlson, 1998).

Advances have been made in technology that can allay fears an organization may have about remote employees staying connected. Currently, a remote worker can frequently and easily connect with team members and the leadership of an organization through written communication like email and text messaging. A remote worker can even participate in collaborative processes through blogging or by contributing ideas to documents "shared" through an internet based file sharing system. If verbal communication is desired, there are even more options available. In addition to individual telephone communications, remote employees can participate in conference calls and webinars. Visual connectivity is also available through live chats on web cameras or video exchange.

The second common concern regarding remote workers relates to the fear that without visual monitoring a worker simply won't work to their maximum capacity. Peterson and Nielson (2009) called the act of employees pretending to work without actually being productive "fake work." They defined this phenomenon as "when (employees) are not focusing on the work that will move your company forward" and discuss the many ways that it manifests within an organization. Peterson and Nielson discussed how traditional organizations struggle with this idea. Organizations with remote employees have the same concerns with the additional challenge of having to use less traditional methods for observing employee progress.

If an organization can overcome their concerns about employing remote workers, they open themselves to a wide range of benefits. With the help of technology,

constraints that had previously made top talent geographically undesirable or otherwise inaccessible are no longer an issue. Physical location and even time zones no longer need to be a barrier to hiring top talent.

In addition to providing the organization with access to the most qualified global candidates, employing remote workers provides cost saving benefits to the organization. Organizations realize cost savings because no physical office space is required for a remote employee. A remote worker who is well connected through technology is likely to use that same technology to stay connected to customers, colleagues, and management.

Impact on the worker. Possibly the most impactful benefit of employing remote workers is the increased job satisfaction that results from the employees' ability to improve their work life balance. Work life balance is desired by a wide range of employees for a variety of reasons. While many people think workers with young children at home would be most interested in flexible scheduling, Offstein and Morwick (2009) cited the desire to work remotely can also be found in workers near retirement who want to spend more time with family and desire an increase in flexible scheduling and creative work design. Comfort and confidence communicating remotely in work as well as personal lives is also common among individuals who have completed educational coursework in a virtual classroom or who communicate with friends and family through social media. As these individuals enter the workforce and feel confident they can contribute effectively to their work environment while maintaining a flexible schedule, it is likely that a remote work environment will be desirable to them (Erickson, 2008).

Remote workers within an organization that supports a virtual work environment often report positive feelings associated with being paid for the quality of the work they have done, not for the time they spent working. In traditional work environments, it is common to see employees who come in early or stay late receive praise for their contribution to the organization. While it is certainly possible these employees are making great contributions to the organization, according to Ressler and Thompson (2008), the fact that they are working longer, earlier or later hours should not determine their value to the organization. It is what they contribute during their work day that should matter. In effect, in these traditional environments a high-performing and efficient employee could be at minimum overlooked and at worst reprimanded for not working long enough, despite the fact that they are performing at an exemplary level. By design, remote workers usually have to be evaluated on their performance because others in the organization are not able to physically see them working (Ressler & Thompson, 2008).

Effective communication for remote employees. As increased numbers of organizations and workers realize the tremendous opportunities associated with remote employment, both are "making the leap" into this non-traditional work environment. Despite the significant increase in the number of remote workers, few organizations have explored what changes may need to be made to ensure that geographically dispersed workers receive formal and informal learning opportunities in a way that meets their learning style (Mayer, 2002) and ensures that they have the opportunity to continue to grow professionally. An organization's methods for relaying information are less likely to positively influence the employee if the organization does not meet the learning style preference of the remote worker. Without effective communication, a skilled employee is

unlikely to produce the results the organization is seeking. As a result, these remote workers are unlikely to feel satisfied in their roles.

While a similar case could be made for the importance of evaluating the learning styles of collocated workers, remote workers are a particularly vulnerable group. A group of employees that work in a traditional brick-and-mortar setting have many "accidental" learnin opportunities that geographically dispersed employees do not have, such as impromptu follow-up discussions with peers and redirection as needed in the everyday work environment.

The majority of adult learners acquires and retains information best through real-time interaction and discussion. There are opportunities for remote employees to experience this type of learning. Basic websites evolved to interactive blogs, wikis and social networking or file sharing sites allow collaborative learning for geographically dispersed participants (Offstein & Morwick, 2009). Unfortunately, common approaches for distance learning often do not include real-time, social interaction.

The benefits of understanding a remote worker's learning style extends to the organization and the employee. For the organization to maximize productivity of an employee, the worker must understand the message delivered. For the worker to maximize their productivity and as a result feel confident about their role, they must understand the message delivered. Moreover, remote workers will have to continually learn new skills and capitalize on continuing education opportunities because organizations that foster a healthy remote work environment can hire from a global talent pool (Offstein & Morwick, 2009).

Research Purpose

Remote work environments are a desirable state for many employees and organizations and yet attempts to successfully foster this type of environment often fail. While technology is often cited as the primary challenge associated with supporting remote employees, research does not support this widely held perception. Offstein and Morwick (2009) described the variables impeding the success of telework as being human rather than technical in nature. For any employee, there are multiple factors that influence an individual's learning and personal development. The researcher explored only learning style preferences specific to individuals operating in a remote work environment. The purpose of this research was to develop a theory about the relationship between the effectiveness of remote workers in their roles in an organization and the organization's ability to communicate new information in a way that meets the remote workers' learning styles. My research theory proposed that remote employees whose learning styles are supported will be more effective in their role in the organization.

The researcher was interested in learning if participants in the study intentionally or unknowingly made accommodations for their own learning style to adapt to an organization's information delivery methods. For example, a remote worker who is an auditory learner but receives communication primarily through written communication (a visual learning tool) may have discovered that reading the emails out loud helps them remember more of the content of the email than just reading the email without speaking. They may apply this learning and read all emails or select emails out loud to meet their own learning preference. The researcher proposed that in many instances employees will make modifications to support their own learning style. Though modifications often cost

the employee additional time and energy, the researcher proposed that these modifications would increase the employee's effectiveness.

Problem Statement and Research Question

Realizing the challenges that remote workers face related to learning and the importance of an organization being able to effectively educate employees has led the researcher to the following question: What is the relationship between an organization's ability to meet the learning style of a remote worker and the effectiveness of that remote worker?

Remote workers face unique challenges in their work environment that can be exacerbated if their learning style is not considered by the organization. The extent to which the learning style of the remote worker is met can impact their overall effectiveness and job satisfaction.

The researcher was also interested in three additional topics. First, if the individual learning styles of remote workers are not met by the organization, are they perceived by the organization to be unsuccessful in their roles? Second, if the individual learning style of a remote worker is not met by the organization, what, if anything, does the remote worker do to compensate? And third, does that compensation improve the employee's performance?

Definition of Terms

There are several key terms that are crucial to the research and to understanding the theory presented. The key terms and their definitions are:

Remote employee or remote worker. For the purpose of this research, a remote employee or remote worker is defined as an individual who spends at least 80% of their

time working “remotely” or outside of a traditional brick-and-mortar office environment. The remote employee does not have many of the advantages that onsite employees may have such as the ability to interact with coworkers in person or be observed by their boss in the traditional sense. The remote employee primarily communicates with their supervisor and coworkers via electronic communication.

Telework. According to Offstein and Morwick (2009), "Telework refers to incorporating and optimizing technology to be more productive, to collaborate better, and to be more proactive. However, telework is not just about technology, it is about people. The manner in which people use technology in their work relationships is at the heart of making telework work" (p. XVI). Telework should not be confused with telecommuting which is to replace the daily commute with communication to the office (Kurland & Egan, 1999).

e-Learning. e-Learning can be defined as any process of gaining new or refining existing information that is supported wholly or in part by technology. Clark and Mayer (2008) defined e-learning as three-pronged: "the "e" in e-learning refers to the "how": the course is digitized so it can be stored in electronic format. The "learning" in e-learning refers to the "what": the course includes content and ways to help people learn it; and the "why" refers to the purpose: to help individuals achieve educational goals or to help organizations build skills related to improved job performance (p. 11). Some examples of e-learning include web-based tutorials, webinars, and courses delivered through audio tape or CD-ROMs.

Learning Style Dimensions. Consulting Resource Group (CRG) (http://www.crgleader.com/images/samples/LSI_Sample.pdf), a provider of learning

assessments and solutions, uses the term “learning style dimensions” to describe what they have identified as the four preferred ways that people learn. CRG states that every person is capable of learning using each of the four dimensions, but we all have at least one preferred method. CRG identifies individual learning style dimensions through a Learning Style Inventory (LSI). An individual completes a 16-question assessment and is immediately provided with a description of the learning style preference.

Behavioral Learning Style Dimension. The LSI defines the behavioral learning style dimension as one of four ways a person is able to learn. According to Consulting Resource Group (http://www.crgleader.com/images/samples/LSI_Sample.pdf) describes individuals who fall into the four categories. An individual who scores high in the Behavioral Learning Style Dimension will:

> …prefer to learn by themselves, rather than in a group or class situation; they have a strong preference for low direction from instructors. These individuals like to have wide boundaries to learn on their own, at their own pace, their own way; they don't want others to help unless they ask. They don't like long lectures or abstract thinking. They want realistic learning examples with factual examples from instructors with "real-life" experiences. They like presentations short and to the point; they don't like instructors who talk too much and waste time. They learn by doing, rather than hearing. They are quick to set goals and often achieve them. They prefer to be allowed to "discover" knowledge, rather than have it handed to them in a book.

Cognitive Learning Style Dimension. Consulting Resource Group (http://www.crgleader.com/images/samples/LSI_Sample.pdf) defines the cognitive

learning style dimension as one of four ways a person is able to learn. According to CRG, an individual who scores high in the Cognitive Learning Style Dimension will:

> …like data-oriented presentations that link concepts to statistics, historical events, and outcomes, with specific, directional, and complete instructions. Because this dimension's primary learning mode is via the eye gate (visual), they prefer aids such as graphs, maps, charts, and videos. They are perfectionistic in how they get work done and have high expectations for themselves and others.

Interpersonal Learning Style Dimension. Consulting Resource Group (http://www.crgleader.com/images/samples/LSI_Sample.pdf) defines the interpersonal learning style dimension as one of four ways a person is able to learn. According to CRG, an individual who scores high in the Interpersonal Learning Style Dimension will:

> …respond best to a friendly, nonjudgmental approach to learning. They like to hear (auditory learners) others give testimony about how they became skilled in their area of expertise. They like to know how information being presented can help others in positive ways. They often keep their opinions private so arguments won't occur. They learn best by listening and watching. They prefer lectures and most often are good at taking notes. They like having time to absorb learning and complete assignments and dislike fast-paced, high-pressure learning environments. They prefer working in small groups versus talking in front of large groups.

Affective Learning Style Dimension. In the final learning dimension, according to CRG (http://www.crgleader.com/images/samples/LSI_Sample.pdf) an individual who scores high in the Interpersonal Learning Style Dimension will:

> …enjoy learning from others if the experience is not hard or boring. They like being innovative and creative when learning and prefer open-minded instructors who are lenient when evaluating performance. They don't learn as well in highly structured learning environments that contain routine procedures and inflexible rules, including traditional forms of classroom learning. They must physically move to learn. Experiential means learning by doing, with interactive groups and storytelling as methods of instruction.

Content. In this research, the researcher makes a distinction between the communication vehicle and the communication content. The content refers to the messaging itself, writing style, length or clarity of the messages, information architecture or outline clarity in the messaging, or other elements that are related to the communication itself rather than the communication vehicle.

Communication vehicle. The researcher identified 12 communication vehicles used to communicate with remote workers including conference and one-on-one calls, emails, instant messaging, webinars (live and recorded), in-person visits, on demand training, surveys, the company website, SharePoint for file sharing and proprietary software programs.

Effectiveness. For the purposes of this research, effectiveness is defined by the individual team leaders. The researcher asked each team leader to rate the effectiveness of each of their remote workers on a scale of one to ten, with one being incredibly ineffective and ten being incredibly effective.

Visual learning. Visual learning is the receiving of information through the sight sense. Some examples of how a remote worker can experience visual learning include

graphics and images shared via email and webinars (Oud, 2009). Individuals whose primary learning style is visual respond to pictures and maps. They also often have a good sense of space and direction.

Auditory learning. Auditory learning is the receiving of information through the hearing sense. Some examples of how a remote worker can experience auditory learning include telephone conferencing and verbal instructions (Oud, 2009).

Experiential learning. Experiential learning is "based on the idea that change and growth take place when people are actively (physically, socially, intellectually, emotionally) involved in their learning rather than just being receivers of information" (Stanchfield, 2007, p.3). An example of how a remote worker can participate in experiential learning could be the completion of an exercise where they apply new information to their own real-life scenario.

Significance of Research

The number of organizations and industries that employ remote workers is on the rise and yet it has been the researcher's experience working as a senior level training manager and business school instructor for the last decade that a startlingly low amount of consideration is typically given to the learning style of the remote employee. There has been an increase in awareness associated with the importance of providing a supportive work environment and cutting edge tools and equipment that help a remote employee feel connected (Yelon, 2006), but with these advancements has come little consideration of the uniqueness of the individuals receiving the information.

It is more common to read about a remote individual's learning style in research conducted within online collegiate institutions. There has been a significant amount of

research that addresses the learning style and needs of students learning remotely (Clark & Mayer, 2011; Yelon, 2006), however according to Oud (2009), environment and equipment are still the concerns more commonly addressed.

The research will contribute to the body of knowledge because very little research has been done to demonstrate the value of identifying the learning styles of remote workers. Organizations require employees to absorb and retain new information on a regular basis and yet, despite the fact that individuals learn differently, information is often delivered only one way. Research has been done to explore how adult learners operate within an online university, but little has been done to explore what happens to adults when they enter a work environment and still need to continue to gain new information.

Chapter Two

Literature Review

The increase in popularity of working remotely and the consequential cultural shift has been compared to the transformative effects of the introduction of the automobile (Potter, 2003). Just as cities began to be built around roadways, organizations are beginning to base their design and practices on the assumption that workers will be connected at least in part through technology.

The design shift of collocated to geographically dispersed workers in existing organizations can have a significant impact on the culture of the organization. It has been a common practice within organizations to reward employees for the number of hours they work or for coming into the office early or staying late. Much to the disappointment of efficient workers, leadership has historically gravitated toward rewarding effort as opposed to rewarding results (Ressler & Thompson, 2008). A remote work environment forces employers to put a much greater emphasis on results as opposed to the time or effort spent on any task (Felstead, Jewson, & Walters, 2003).

A shift in focus from effort to contribution can benefit the employee and the organization. According to Hunton and Norman (2010), an efficient and effective employee can produce greater results and feel more confident about their role in their organization. Employees can put all of their effort into contributing to the organization's overall goals instead of wasting energy trying to appear as if they are working hard. Simultaneously, the organization benefits because the employee has an increased commitment to the organization. Employees who are committed to their organization will be more productive than those who are not (Hunton & Norman 2010).

Creating a Successful Remote Work Environment

If an organization or an employee decides to explore the idea of a remote work environment, it is not as simple as having the worker stop coming in to a traditional office (Whittle & Mueller, 2009). There are challenges associated with remote employee success for both organizations and for employees transitioning from a traditional workplace design to one that involves remote employees,

The specific challenge addressed in this research involves communicating new information to remote workers. Information conveyed to an employee can range from complex concepts to simple, daily communications. In a traditional work environment it is challenging to effectively relay information to workers, if for no other reason than because each worker has unique learning abilities and preferences; an organization with remote employees has unique considerations that should not be ignored.

Adult learning. According to Clark and Mayer (2011), in the business environment, any company's e-learning can be categorized into three goals: inform, perform procedure or perform tasks. Table 1 outlines the three categories Mayer and Clark discussed in E-Learning and the Science of Instruction.

Table 1

Three e-Learning Goals

Goal	Definition	Example
Inform	Lessons that communicate information	• Company history • New product features
Perform Procedure	Lessons that build procedural skills (to promote near transfer)	• How to log on • How to complete an expense report
Perform Tasks	Lessons that build strategic skills (to promote transfer)	• How to close a sale • How to analyze a loan

Clark & Mayer E-Learning and the Science of Instruction, 2011

Learning style differences. Using research by Kolb and Kolb (2005) as a foundation, Consulting Resource Group (CRG) (http://www.crgleader.com) developed a series of assessment tools that assess learning style differences, identify and individual's learning style, and allows organizations to make adjustments to information delivery based on their specific learning style.

Learning tools in a remote environment. Organizations that have capitalized on the idea of employing remote workers are faced with the challenge of effectively and efficiently relaying information through alternative educational methods available for geographically dispersed workers. The methods available for communicating with remote workers are extensive. Commonly used tools include email, audio and webinar conferencing, and interactive websites. Tools that are specifically designed to teach a new idea or concept to remote workers are referred to as "e-learning tools." Each of these tools can be used to varying degrees of effectiveness depending on three major considerations: the environment in which they are used (Montero, 2004), the content

being delivered (Clark & Mayer, 2011), and the learning style of the remote worker (Yelon, 2006).

Another significant consideration is that organizations that employ remote workers have fewer opportunities to confirm learning, so they have to be thoughtful and even creative to ensure the content that was delivered did impact the learner. For example, collocated workers may discuss their new information in impromptu conversations at the water cooler or they may ask a question in passing when they see a leader in the hallway. Remote workers do not have these opportunities for unplanned or "accidental" learning confirmation.

The fact that learning confirmation does not happen as easily for remote workers simply means a conscious effort must be made to create an environment that fosters the same level of discussion and self-discovery. There are many outlets available to serve this purpose. Geographically dispersed employees can ask questions and express thoughts on an interactive website or blog. "Facebook and MySpace gained popularity to link people with similar interests, but organizations can now use the same technology to identify their own people with critical skills or specific subject matter expertise" (Offstein & Morwick, 2009, p. 163).

Content considerations for e-Learning. No matter the industry an organization is in nor the role of the employee in the organization, e-learning goals will fall into one of two categories—inform or perform (Clark 2003). Collocated and remote employees constantly receive information that is either a notification (meant to inform the employee) or directional in nature (meant to cause the employee to perform).

There are five types of e-learning content within the categories of inform and perform (Clark 2003). The five types of e-learning content are defined and illustrated in Table 2 (Clark & Mayer, 2011, p.15).

Table 2

Five Types of Content in e-Learning

Content Type	Definition	Example
Fact	Specific and unique data or instance	The company log-on screen; My password is John1
Concept	A category the includes multiple examples	Web page password
Process	A flow of events or activities	Performance appraisal process
Procedure	Task performed with step-by-step actions	How to log on
Principle	Task performed by adapting guidelines	How to close a sale

It is essential when considering the delivery of e-learning, to understand how the recipient of the content is best able to process information. How a person understands, processes, and applies information determines their learning style. An individual's learning style influences how they receive new information. A remote worker's ability to effectively receive new information greatly impacts their ability to contribute to their organization.

In any work environment, effective communication is crucial to the success and the ongoing learning of the employee. For remote workers, however, ineffective communication can have much more harmful effects than for workers in a traditional work environment. Learning in a traditional work environment is often reinforced through impromptu conversations with leaders and peers whereas the remote worker

rarely stumbles into those helpful unstructured conversations. Additionally, the cues in the physical environment like facial expressions and body language are often unavailable or distorted for the remote employee providing them with less data than the worker in the traditional office environment.

An extensive amount of research has been done related to learning in general. Most notably, Gardner (2004) offers research related to the theory of multiple intelligences. Gardner's theory that individuals have a variety of ways of processing information is useful when considering how to effectively communicate with remote employees. Gardner references eight intelligences—most of which are independent of one another. These intelligences include logical-mathematical, spatial, linguistic, bodily-kinesthetic, musical, interpersonal, intrapersonal, and naturalistic. Although Gardner's research differs from research about adult learning styles, the researcher acknowledges that multiple intelligences do exist and that the approach a remote worker takes in their work environment may influence their work and how a leader perceives them.

In an article regarding using technology in education, Gardner (2004) also noted "for the first time it is possible to individualize education—to teach each person what he or she needs and wants to know in ways that are most comfortable and most efficient, producing a qualitative spurt in educational effectiveness" (p.86). Gardner expanded his discussion beyond the finding that everyone learned differently to include how those unique styles can be addressed using technology to enhance learning citing "Computers will permit a degree of individualization--personalized coaching or tutoring--which in the past was available only to the rich" (p.31). Gardner had such faith in the power of education delivered through computers he went on to say in the same article that

credentials from accredited institutions may become less important as people begin to learn how to effectively educate themselves (Gardner, 2000). This concept is closely tied to the theory behind Results Oriented Work Environment (ROWE) that focuses on what you have (as far as an accomplishment, product, or skill) as opposed to the path (length of time, method, etc.) that you took to get there (Ressler & Thompson, 2008).

A productive first step any organization can take to adapt learning to remote workers is to determine the individual learning style of each remote employee. Learning style preferences can be identified through a variety of learning style assessments. Once a learning style preference is identified, the organization and the employee can make adaptations as appropriate, including the many ways new information can be conveyed to remote employees. For example, an attempt to connect with a visual learner would involve images whereas an attempt to connect with an auditory learner would involve information that could be heard rather than seen. In an attempt to address these learning styles, organizations need to be mindful of how information is delivered (Ressler & Thompson, 2008).

Potential Problems with Remote Employment

Many individuals and organizations claim remote employment costs more than it is worth – particularly in the categories of employee motivation and connection to the organization (Davenport & Pearlson, 2006). Remote working environments that companies and workers have created vary in the extent that employees are remote, the technology used to foster a connection to the organization, and the ability to successfully meet the needs of the company and employee.

Davenport and Pearlson (2006) describe five "types" of virtual worker arrangements. Each type is more remote than the previous. "Occasional Telecommuting" is a type of remote employment that "refers to situations in which workers with fixed offices occasionally work at home" (p.53). "Hoteling" means the employee spends slightly more time away from the traditional office environment than the occasional telecommuter. It is expected that the employee with this arrangement spends so much time out of the office they are not given a fixed office space. Rather, they often spend their work day at client sites, occasionally using an available cubicle in their company's traditional office (p. 53-54). The "tethered worker" has some mobility, but is expected to report to the office regularly (p.54) and the "home worker" has a full office in the home, whether it be a separate room or the kitchen table (p.54). The final type of remote worker is "fully mobile" and doesn't even have a home office. "They are expected to be on the road at customer sites at all times during the workday" (p.54).

No matter the degree to which remote workers spend their time separated from a traditional office environment, their concerns and that of their organization are the same. Organizations question whether they can keep a worker who does not report to a traditional office space with a group of peers connected to the organization and working at their maximum capacity. Exposure to corporate culture, increased loyalty, unplanned communications, access to people and materials, managerial control, and corporate structure are all common elements of the traditional office environment that need to be acknowledged by managers working with remote workers (Davenport & Pearlson, 2006).

Chapter Three

Research Methodology

Research Design

The design of this research is multiple positivistic case studies. Each of the four case studies included one leader who supervises remote workers. Data collection was done through leader and remote worker interviews, the completion of the Learning Style Indicator by each remote employee, and document review.

The researcher was interested in determining the learning styles of individual remote workers, uncovering the extent to which their current organizations meet those learning styles, and measuring how effective the remote workers are in their roles. The research design included three phases (Yin, 2003, p.50):

1. Design: theory building, use of case study methodology, and data collection design.
2. Implementation: conducting case studies, collection and analysis of data, and the production of individual case study reports.
3. Conclusion: cross case data analysis, development of conclusions, cross case report development, and the review of the theory based on the findings of the study.

Theory

The researcher theorized that remote employees working in an organization that is aligned with their learning style will be viewed as effective by their leader. The researcher also believed remote workers whose learning style preference has been

addressed would report greater overall satisfaction in their job. See Figure 1 for a graphic depiction of the theory.

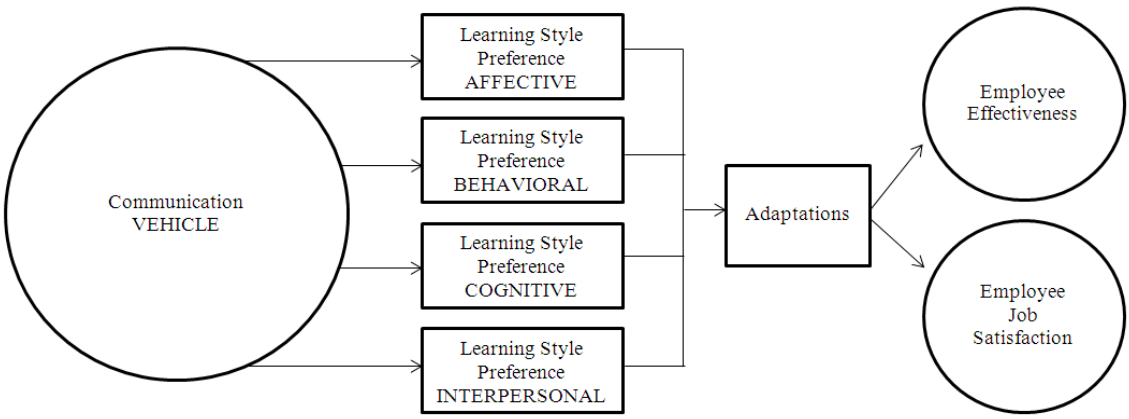

Figure 1. The process of information delivery to remote workers. The initial consideration is the communication vehicle in which information is delivered. When a remote worker receives the information, they will process it using their learning style preference. The remote worker then may or may not make an adaptation in their work environment to better understand and apply the information they have received. Finally, the understanding and application of the information they have received contributes to their overall effectiveness and satisfaction.

An additional element of the theory involved adaptation that may or may not be made by a remote worker. The researcher theorized that some remote workers make effective adaptations in their work environment to meet their own learning needs. These workers would be viewed by their leader as more effective and would report greater job satisfaction than those remote workers who did not make any effective adaptations.

One of the most influential thinkers in the field of theory development is Robert Dubin who created a two-part, eight-step model of theory development and theory verification (Dubin, 1978). The researcher used Dubin's model in this study; the details are outlined below.

Units of analysis. The first step of Dubin's (1978) eight-step theory building and theory verification model is to identify the units of the theory. The units of the theory include each of the items the researcher was attempting to learn more about. These units of theory are supported by existing literature and the researcher's own experiences.

The units in this study include (a) the methods used by each research participant's organization to convey information, (b) the learning style of the remote workers participating in the study, (c) adaptations that remote workers make to reach their own learning preference, and (d) the overall effectiveness of the research participant in their role in the organization as determined by the leader.

Laws of interaction. Next, Dubin's (1978) model requires the establishment of the laws of interaction that govern the theory. This is essentially an examination of how the units defined in step one interact with one another.

In this study, the researcher examined the extent to which an organization's methods used to relay new information to a remote employee matching the learning style of the research participant impacted the overall effectiveness and job satisfaction of the research participant in their role in the organization. Additionally, the researcher examined how adaptations made by the remote employee to adapt to the delivery method impact the overall effectiveness and satisfaction of the employee.

Boundaries. The third step, according to Dubin (1978), is to identify the boundaries of the theory or the "real-world" limits of what is being explored. The boundaries of this study include organizations that employ remote workers who receive direction from a leader with whom they communicate virtually either through email, telephone, or virtual meeting tools. The theory presented can be applied to collocated

groups, but in this study it was tested only with remote workers. Organizations with employees who are collocated with their leader and receive or have the opportunity to receive communication in-person are beyond the boundaries of this study.

System states. The fourth step of Dubin's (1978) approach to theory development is to specify the conditions under which the theory is operative. This study operated under organizations that employ workers who operate remotely at least 90% of their work life. Consequently, these remote workers communicate and receive direction via email, telephone, or other remote communication methods. An additional condition relates to the state of the organizations participating in the study. The study was conducted within organizations that are considered healthy.

Additionally, there are external factors that influence an individual's learning identified by Kolb & Kolb (2005) as "learning space." The study operated under the assumption that external developmental factors are normal and would not impede the individual's learning.

Propositions. The second part of Dubin's two-part process for theory development and verification "has as its main purpose the verification, or confirmation, of the theoretical framework completed during the first theory development part of the theory-building cycle" (Lynham, 2002).

Step five is to specify the propositions of the theory (Dubin, 1978). For every theory a logical outcome of a model can be proposed. In this study the researcher proposed that:

- if the research participant's organization uses communication methods that are aligned with the research participant's learning style, the remote employee will be

happier and more effective in their role in the organization than remote employees whose learning styles are not aligned with their organization's communication methods.

- remote employees who make adaptations when their learning style is not met by the organization will be more successful than those who do not, though the additional responsibility and effort required to support the adaptations may cause the employee to be less satisfied with their job than the employee whose learning style is met by the organization.

Empirical indicators. The sixth step relates to the identification of empirical indicators within the study. Identifying empirical indicators is necessary to make the proposition statements testable and is needed for each unit in each proposition whose test is sought (Dubin, 1978). The study used the following empirical indicators:

Leader interview. The researcher interviewed each leader who elected to participate in the study to determine how they communicate new information to the employee and the extent to which the employee meets their job expectations. Responses regarding how the leader communicates with the remote worker were recorded in two sections of a rubric that outline four learning style dimensions. The researcher tallied the leader's responses during the interview process.

***Remote worker interview*.** The researcher interviewed each remote worker who elected to participate in the study to determine how they receive new information, what adaptations they make, if any, to meet their own learning style, and what their overall satisfaction is with their current job. Interview responses were recorded in two sections of

a rubric that outline four learning style dimensions. The researcher tallied interviewee responses during the interview process.

Document review. The researcher reviewed examples of communication from the organization to the employee. These "documents" included written communication as well as video or audio recordings. Like the participant interview, documents were assessed using two sections of a rubric that outline four learning style dimensions. The researcher tallied which documents support which learning style dimensions.

Learning Style Inventory. Each remote worker who elected to participate in the study completed a Learning Style Inventory (LSI). There are four identified learning styles (http://www.crgleader.com/images/samples/LSI_Sample.pdf); the LSI calculated a numeric score between 20 and 60 for each participant in each of the four dimensions. The higher the score in any dimension, the more likely the dimension influences learning. Following the same logic, the lower score in any dimension, the less likely it is the dimension influences learning. The combination of the four scores will identify the participant's learning style pattern.
(http://www.crgleader.com/images/samples/LSI_Sample.pdf)

Hypothesis & Testing the Theory. Lynham (2002) discussed the seventh step of constructing the hypotheses to test the theory by saying "Before the theory can be tested and verified through research, hypotheses must be constructed from the theory" (p.27). For this study, the researcher did not construct and test hypotheses, but rather examined the empirical indicators discussed to determine if the theory was supported. There were three possible results; the researcher would either support her theory, disprove her theory or a new theory would emerge.

Data Collection. There were three phases in the data collection process. The three phases include: Remote worker and Leader interviews, communications document review, and LSI completion by remote workers.

Phase 1—Leader and Worker Interviews: The first phase of data collection required the leader to invite multiple remote employees to participate in the study while clearly stating that participation is voluntary. Interested employees contacted me directly and none of the remote workers invited to participate were required to alert the leader regarding their decision. This protected the identity of the research participant.

Worker interviews: When at least three people agreed to participate, the researcher moved to the next step of the research process. The researcher interviewed participants via the telephone regarding the different ways they receive new information related to their work responsibilities. Interview responses were recorded on a rubric divided into three parts: Learning style preference, learner likes, and learner dislikes. Each of the four learning style dimensions intersects each of the three interview content categories. During the interview process, the researcher tallied each time a statement by the interviewee fell into one of the twelve combinations available (for example, learning style preference/behavioral or learner dislikes/affective).

A tally mark in the "learning style" or "learner likes" column was recorded as a positive mark for the corresponding learning style dimension. A tally mark in the "learner dislikes" was recorded as a negative mark for the corresponding learning style dimension. After concluding the interview, the researcher determined how often organizational communication is aligned or "positive" with the remote worker's "learner likes" compared to how often organizational communication registers as a "negative" or

misalignment with the remote worker's "learning dislikes" for each learning style dimension.

In addition to how they received the information, the researcher examined the extent to which remote workers are able to understand and apply what they are expected to learn. This involved asking each participant to self-report how well they believed they understand and are able to apply the information they are given.

Leader interviews: The researcher interviewed the leader via a recorded webinar on how he or she communicates with the remote workers and what each remote workers strengths and areas for improvement are. These questions were largely open-ended and designed to encourage the leader to share areas of strength and opportunity for the participant related to learning and applying new information. Answers related to how the leader communicates were tallied on a rubric in the same manner as the participant responses. The leader was also asked to rank each remote employee's overall performance and contribution to the organization on a scale of 1 to 5. Because the leader did not know who elected to complete the LSI and who declined, the researcher collected data regarding all of the individuals who were invited to participate, but only used the relevant data.

Phase 2: Document review. As part of the research the researcher reviewed tools used to communicate with the remote employee. These tools included written, audio, or visual communication and were assessed using the learning style preference section of the rubric used during the interview process. For example, a webinar used to communicate to a remote employee would register a positive tally under the cognitive and interpersonal columns. Unlike the interview, only positive tallies were recorded and

results were reported as the number of documents and tools that support the remote worker's learning style dimension.

Phase 3—LSI completion: The third phase of data collection for each participant was the completion of the Learning Style Inventory (LSI) (http://www.crgleader.com/images/samples/LSI_Sample.pdf). This was a16 question assessment that identifies an individual's natural learning style preference. The Learning Style Inventory (LSI) used to determine each participant's learning style was based on the Personality Style Indicator (PSI). CV Research paired sample t-tests and discovered the pretest and posttest were consistent for each question in the PSI with a 95% confidence interval.

The LSI examines an individual's tendencies to use each of four learning styles and how those tendencies work together. Other factors considered by the creators of the LSI to influence learning include: bio-physical influences such as health concerns and mental disabilities, levels of self-worth, social teachers such as parents, teachers, and friends, and "emotional anchors" otherwise known as prominent positive and negative life experiences; these factors and two additional factors were explored in the participant interviews.

Additionally, the creators of the LSI concede that environmental systems such as family, culture and workplace influence learning. This is of particular interest to me as this study will focus on remote workers and the unique environments in which they operate.

Data Analysis

Five separate units of analysis were examined. The units included the organization's communication methods, the employee's learning style, adaptations made by the employee to better understand and retain information, the employee's effectiveness as determined by the leader, and the employee's satisfaction in their job as determined by the employee. Data was collected and analyzed for each unit of measure. Table 3 shows the units of analysis with its corresponding definition, the data collection, and the empirical indicators for that unit.

Table 3

Data Analysis Process

Units of Analysis	Definition	Data Collection Process	Empirical Indicators
Communication Methods	Organization's approach(es) for delivering information to employee	Leader and participant interviews, document review	Researcher will review communication materials provided by employee
Employee Learning Style	How employee acquires new information	Completion of the Learning Style Inventory	The LSI inventory score
Adaptations Made by the Employee	What changes the employee makes to received information in an attempt to better understand and retain content	Employee interview	Identify & describe changes and types of adaptations
Employee Effectiveness	The extent to which an employee successfully completes their job requirements (determined by the leader)	5 point Likert scale completed by leader	Scores 3 or lower will be considered ineffective while 4 and above will be considered effective.
Employee Satisfaction	The extent to which the employee is happy in their job (determined by the employee)	5 point Likert scale completed by employee	Scores 3 or lower will considered unsatisfied while 4 and above will be considered satisfied.

Participant Selection

To find participants for the study, the researcher contacted individuals with whom the researcher had become acquainted during professional employment, associations affiliated with organization development and remote employment, as well as personal acquaintances. The researcher believed that two to three leaders and 10 remote employees would provide enough information for a robust study, while still being a manageable and realistic number. The researcher was able to interview four leaders and 19 remote workers for the study.

Remote employees were invited to participate in the study voluntarily through their leader. Remote employees were asked to contact me directly if they were interested in participating in the study. Findings were reported to the leader as group results to protect the anonymity of all of the remote employees.

Ethics and Protection of Research Participants

Anonymity of the remote workers was protected throughout the process. The leader made the initial contact and clearly conveyed that participation was both voluntary and confidential. The remote workers were directed to respond to me if they were interested in participating and the leader would have no knowledge of which individuals accepted or declined the invitation.

Data was collected during the interview with the leader related to all of the participants invited to participate in the study. Only the information related to the participants was used to examine how a remote worker's learning style impacts their effectiveness as perceived by their leader. When writing about findings, the researcher assigned a pseudonym for each participant and each leader.

All requirements prescribed by the Institutional Review Board of the University of St. Thomas were met. All research participants were informed of the process and procedures involved in the study and were given a consent form that included a description of the study and the steps taken to protect their identity. Additionally, consent was sought to tape record all interviews so the researcher could identify exact quotes as needed.

Conclusion

The research explored the opportunity many organizations have to connect with their remote employees. Some organizations may successfully support remote employees by accidentally meeting their learning style needs or the employee may make accommodations to ensure his or her own learning. As the research indicates, with minor changes to meet the learning style of the remote worker, both the organization and employee could see increased success.

Chapter Four

Findings

Although there are several key findings from the research outlined in the next several pages, one must be identified first as it is the bedrock for the individual participant summaries. Initially, the researcher theorized that the vehicle used to relay information to a remote worker and that remote worker's learning style preference would influence both employee effectiveness and job satisfaction. The researcher also theorized that the adaptations made by the employee, either consciously or less consciously, would contribute to the same two measures.

As the researcher interviewed participants, the researcher repeatedly heard them identify an inclination to use a communication vehicle that was, as the researcher had theorized, a match for their learning style preference. For example, one participant with an affective learning style preference expressed that being able to see webinar participants through video chat boxes greatly improved her experiences on conference calls. The researcher expected this because individuals with an affective learning style preference place a high value on connecting with others and video helps facilitate that among remote workers.

However, in addition to these anticipated findings, several unanticipated findings also emerged. Some participants shared that they liked using a communication method that matched their learning style preference and yet gave an example of the use of that vehicle that made their work environment more difficult. For example, a participant with a cognitive learning style preference and professed preference to use email described several instances where she missed vital information because it was buried in a long,

unclear email. She claimed email was her best communication, but the first challenging example she could come up with directly involved the very tool she preferred to use. This caused the researcher to amend her theory to include the content itself (not just the communication vehicle) as a key element in how successfully information is received by a remote worker.

Within each case there is a description of the participant's preferred communication vehicle (with possible exceptions that may make information communicated more or less easily understood depending on the content), a description of each participant's learning style preference, adaptations made by the remote worker in their work environment, and their effectiveness as determined by their leader and their self-reported level of job satisfaction. Each data point collected contributes to the remote worker's overall work environment and collectively illustrates what they experience as they process new information.

Selection of the Cases

The researcher reached out to her own professional network to contact leaders interested in participating in her study. Four leaders from four separate organizations elected to participate. Two leaders worked in the same industry but managed teams with very different purposes. The third and fourth teams were in entirely different industries.

Company 1 is a publishing company and the team is responsible for the sale of textbooks to a specific educational market. The team leader was new to his role in the organization, recently promoted after a year as a sales representative with his current organization, but a decade of sales experience behind him. He expressed an interest in inviting his team of 11 remote employees to participate and eight accepted the invitation.

Company 2 is a vendor responsible for connecting product owners with large retailers. Unlike Company 1, the team leader for Company 2 is the company owner and has three decades of experience in his industry. The role that each member of his team plays varies, but 11 of his 15 staff members work remotely. All were invited to participate and two accepted the invitation.

Company 3 is in the insurance industry and each team member is responsible for analyzing information and decision-making. Each team member has a similar job but with varying responsibilities based on certifications. Company 3's team leader is from the industry and has some responsibilities in common with his team in addition to his leadership role. His entire team was invited to participate and all five members accepted the invitation. After our initial interview and after the researcher interviewed his team, Company 3's team leader was terminated from his role with the organization as part of a corporate restructuring, but remained with the organization in an advisory role for an ongoing project.

Company 4 is the second publishing company that participated in the study, but the team was in a different organization and had very different responsibilities – none of the team members was responsible for sales. The team leader eagerly accepted the invitation to participate but, after a few email exchanges, stopped responding. Approximately a month later, after the researcher had already replaced her team with another, she expressed an interest to participate if the researcher still had space available. Her team of nine people was invited to participate and four accepted. Of the four that accepted, one works in a traditional office setting and interacts with the other eight who are remote.

Table 4 outlines the four participating companies by industry and number of remote workers agreeing to participate in the study.

Table 4

Overview of Study Participants

Case/Company ID	Industry	Number of Remote Workers Participating in Study
Case #1—Company 1	Publishing company (team sells texts to educational market)	8 of 11 remote workers agreed to participate
Case #2—Company 2	Vendor—connects product owners w/large retailers	2 of 11 remote workers agreed to participate
Case #3—Company 3	Insurance industry analysts	5 of 5 remote workers agreed to participate
Case #4—Company 4	Publishing company (no sales responsibilities)	4 of 9 remote workers agreed to participate

Description and classification of communication methods. During participant and leader interviews, twelve communication methods emerged across the four cases. Following are their names and descriptions.

1. A conference call is a telephone call that connects multiple individuals or groups simultaneously.
2. A one-on-one call is a telephone call between two individuals.
3. Email is a system for sending written messages from one individual to another by using computers or other electronic devices.
4. Instant messaging is a process for exchanging typed electronic messages instantly through the Internet, using a computer or mobile device.
5. In-person visits are communications between multiple people or groups in real time and the same geographic location.

6. Webinars (live) are presentations that take place online, allowing participants to see and hear the presenter, and ask and answer questions.
7. Webinars (recorded) are recorded presentations (originally conducted online allowing live participants to see and hear the presenter and ask and answer questions) that can be played at any time.
8. On-demand trainings are tutorials on a variety of topics with varying levels of participant interaction that can be begun, paused or ended at any time by the participant.
9. A survey is the collection of facts, figures, or opinions taken and used to approximate or indicate what a complete collection and analysis might reveal.
10. Proprietary software programs are database tracking systems used to manage projects and information by teams and individuals.
11. SharePoint is an online organizational tool for file-sharing.
12. A company website is the inter- or intranet web page(s) containing company information.

The researcher then compared each of the 12 communication vehicles that emerged during the study and determined if the communication vehicle was a likely match for each learning style dimension. With each positive match, there is a list of possible exceptions that may cause a communication vehicle that is a match to be a mismatch in specific situations because of the content. The researcher also compared each of the 12 communication vehicles and determined if the communication was a likely mismatch for each learning style dimension. With each identified mismatch, there is a list

of possible exceptions that may cause a communication vehicle that is a mismatch to be a match in a specific situation because of the content.

Table 5

Communication Vehicles and Learning Style Match

Communication Vehicle	Match and Reasoning	Content Exception
Conference Call	Interpersonal: audio component	Interpersonal: convoluted instructions or highly critical conversation partners
One-on-one Calls	Behavioral: independent work Interpersonal: audio component	Behavioral: extra information Interpersonal: convoluted instructions or highly critical conversation partners
Email	Behavioral: independent work Cognitive: reading, opportunity to look at information later	Behavioral: extra information Cognitive: unorganized information
Instant Messaging	Behavioral: independent work Cognitive: reading	Behavioral: wasted time Cognitive: unorganized information
In-person Visits	Affective: highly interactive Behavioral: independent work Cognitive: visual component Interpersonal: audio component	Affective: boring or routine Behavioral: extra information Cognitive: only one opportunity to see information Interpersonal: convoluted instructions or highly critical conversation partners
Webinars (live)	Affective: highly interactive Cognitive: visual component Interpersonal: audio component	Affective: boring or routine Cognitive: only one opportunity to see information Interpersonal: convoluted instructions
Webinars	Behavioral: independent work	Behavioral: extra information

(recorded)	Cognitive: visual component	Cognitive: content is unorganized
	Interpersonal: audio component	Interpersonal: convoluted instructions
On Demand Trainings	Affective: experiential, assuming participant action required	Affective: boring or routine
	Behavioral: independent work	Behavioral: extra information
	Cognitive: visual component	Cognitive: content is unorganized
	Interpersonal: audio component	Interpersonal: convoluted instructions
Survey	Behavioral: independent work	Behavioral: extra information
	Cognitive: visual component (if conducted online or on paper)	Cognitive: only one opportunity to see information, content is unorganized
	Interpersonal: audio component (if conducted telephonically)	Interpersonal: convoluted instructions
Proprietary Software Programs	Behavioral: independent work	Behavioral: extra information
	Cognitive: visual component	Cognitive: content is unorganized
SharePoint	Behavioral: independent work	Behavioral: extra information
	Cognitive: visual component	Cognitive: content is unorganized
Company Website	Behavioral: independent work	Behavioral: extra information
	Cognitive: visual component (if conducted online or on paper)	Cognitive: content is unorganized
	Interpersonal: audio component (if audio or video recordings are included)	Interpersonal: convoluted instructions

Content causes a mismatch. One possible scenario where the *content* of a communication causes an effective communication method to fail could be a webinar. A webinar is likely a match for someone whose primary learning style dimension is affective because they are typically entertaining and experiential in nature. However, a

specific webinar could be boring and routine, thereby making it a mismatch for the affective learner.

Content causes a match. The opposite scenario could also occur where the *content* of a communication matches a learning style that would normally prefer a different type of communication vehicle. For example, an individual with an affective learning style preference should struggle with email, but if the content is brief, funny, or tells a story it is likely the individual will be very receptive to the information.

Learning Style Inventory score details. Every participant who completed their Learning Style Inventory received a score for each learning style dimension. The scores range from 16 to 60. The higher a score in a dimension, the more likely this dimension is influencing an individual's perception, approach, and interaction with the environment in learning situations. The opposite is true for lower scores. The lower a score in a style dimension, the less likely that dimension is influencing learning choices and preferences.

Everyone who completed the LSI received four scores – one for each learning style dimension. Any learning style dimension in which an individual scores 40 or higher was considered a learning style preference that influences their learning. Most people had two scores above 40 and two scores below, but small percentages of people will have three scores above or below 40 or all four scores within five points.

The degree to which a score influences an individual is also considered when reviewing LSI results. The LSI designates four levels of influence and their corresponding scores as: 29 or less is weak, 30 to 39 as moderate, 40-49 as strong, and over 50 as very strong. For example, two individuals could both have a primary learning style dimension of behavioral, but one with a score of 42 may be strongly influenced by it

while the other with a score of 57 would be very strongly influenced by their learning style dimension.

It should be noted that, despite the fact that several of the participants and leaders commented that they were sure they could guess the learning style or opinions of another team member, it would be very difficult for any reader to accurately link the following survey results to the participants who contributed the specific individual comments. The researcher took great care to ensure the anonymity of each participant by removing any identifying information from specific quotes.

Individual Cases—Company 1 (Publishing Company)

According to remote worker and team leader interviews, Company 1 primarily uses eight communication methods. They include conference and one-on-one calls, email, in-person visits, live and recorded webinars, on demand trainings, and the company website.

Table 5 outlines each of the eight communication methods used by Company 1 and illustrates that each learning style preference is met by at least one communication method. For example, because Company 1 uses email communication, the researcher was able to determine that behavioral and cognitive learning styles are met. Additionally, Company 1 uses live webinars, so affective and interpersonal learning style preferences are also met. Within Company 1 it is possible that the communication methods are used to deliver content that renders them less effective or entirely ineffective, but the effective communication vehicles are available for all learning style preferences.

Participant A—Findings. Participant A's primary learning style is cognitive. With a score of 53, Participant A is very strongly influenced by his primary learning style

dimension. His secondary and tertiary learning style dimensions are behavioral and interpersonal, and with scores of 45 and 40 respectively, and is also strongly influenced by both. Participant A scored higher than 40 in three learning style dimensions, so instead of the typical primary and secondary influences, he has primary, secondary, and tertiary influences that impact his learning environment. Participant A communicates by using all of the communications available within Company 1. All communication vehicles used are a match for his primary, secondary, or tertiary learning style dimensions.

Exceptions. Participant A shared one specific example of a challenging task he had been given. He was asked to complete a spreadsheet outlining his current clients' needs. He expressed in great detail why the spreadsheet was largely impossible for him to complete, explaining that the colleges he works with have such a variety of start times there is no way to accurately predict usage on the timeline the chart required. Participant A completed the chart half-heartedly and never heard feedback on it from anyone within his organization. He shared with little emotion, "They've asked you to do something and hopefully it's accurate."

The directions for completing the spreadsheet were written and discussed on a conference call. Both methods of delivery should have been well-received by Participant A, but he perceived the content of the communication as a waste of his time. This perception caused him to struggle with successfully completing the process.

Adaptations. Participant A should have been perfectly matched with all of the communication vehicles used by his organization and yet he expressly noted two challenges associated with email. Like the specific exception previously discussed, the first challenge Participant A experienced was rooted in the content of the communication.

In his role, receiving new product information is critical and the information he received came frequently and often in small pieces.

Participant A:

> Not always do I get to all of my emails. They kind of get cluttered in my inbox and then when I want to look for something I go out to the web portal which is organized by different folders.

He also noted that when he communicated with his customers, he most frequently used email, but he "find(s) the majority, if I really want information, I have to meet with the customer in person." According to his learning style dimension, Participant A should have communicated well with the email format because of the visual component, yet he cited two instances of quantity and quality issues related particularly to email.

Employee effectiveness and job satisfaction. Participant A had a leader-determined effectiveness score of 9 and a self-reported satisfaction score of 7. Company 1's leader did not hesitate to rank Participant A as one of the top two most effective employees on the team. This did not surprise the researcher considering he is a match for the communication methods used in Company 1 and he has identified and made adaptations to bridge any challenges that have arisen related to content.

Participant A, also not surprisingly, claimed a high level of satisfaction in his job. The two reasons he listed for why his job satisfaction wasn't higher both tied back to the adaptations he makes. He said, "One of the biggest things I'd like to see is our systems updated to be more adequate. One would be systems upgrades and I think smaller territories." (Smaller territories would allow for more in-person visits.)

Participant B—Findings. Participant B's primary learning style is interpersonal. With a score of 51, Participant B is very strongly influenced by her primary learning style dimension. Her secondary learning style dimension is affective, and with a score of 43, she is strongly influenced by her secondary learning style dimension. Conference and one-on-one calls, in-person visits, live and recorded webinars, and on-demand trainings are communication vehicles that match Participant B's learning style dimension. Email and the corporate website are not a match for Participant B's learning style dimension.

Exceptions. Conference and one-on-one calls, in-person visits, live and recorded webinars, and on-demand trainings are all a match for Participant B's learning style dimension unless she perceives that the facilitator talks too much (over-explains), wastes time, starts late, appears to be disorganized, or she is only given one opportunity to see information. During her interview, Participant B spoke most often about her frustration with disorganized communication. Specifically she mentioned the process she has to follow to receive feedback on her own performance.

Participant B:

> For me, in my opinion, that platform is not conducive to performance review. It's all documented. It's a form that you fill out. But there have been times in the past where you filled out these online forms, submit it and once you did that, nothing ever comes of it.

The vehicle for completing her own performance review matched her learning style, but because she never perceived a benefit to completing the process, she struggled. Conversely, email and the corporate website are not communication vehicles that match Participant B's learning style dimension unless the content is fun and engaging, includes

explanations that are easy to follow, or provides an opportunity for participants to interject questions. Participant B did have some positive feelings associated with email – a mismatch for her learning style dimension. This could be attributed to the care her manager put into making the team's email communication engaging or that directions sent via email or shared on the corporate website are usually accompanied by a one-on-one or conference call that allows people to ask questions. During his interview, the team leader did not share specific details surrounding his email design, but he did express that he goes through "great pains" to ensure information is delivered "appropriately."

Adaptations. Despite a mismatch with her learning style dimension, Participant B listed email as her preferred communication method. When asked why she found email so valuable, she cited ease of access as the primary reason stating "I have a Blackberry so I can read my email so I can keep up with that. I can access it anytime, anywhere." However, immediately after sharing how easy email access was, she commented, "It's basically like they've got a chain around your leg so they know where you are and they can get you anytime they want to! It used to be a really good thing and now it's really…you're tied to it." Participant B indicated that Company 1 has clear expectations about the importance of communicating through email. Participant B shared that she prefers to call an individual if she needs clarification, but she has adapted to using email as the primary communication vehicle.

Employee effectiveness and job satisfaction. Participant B had a leader-determined effectiveness score of 7 and a self-reported satisfaction score of 9. According to her Learning Style Inventory, Participant B's learning style was primarily supported with the exception of email and the corporate website. During the interview process it

was discovered that her adaptation of calling with questions helped to bridge the gap in email communication. Considering Participant B's learning style dimension is a match for seven of the nine communication vehicles used by Company 1 and the possible exceptions that would derail communication uncovered during the interview were minimal, Participant B's effectiveness as determined by her leader as well as her job satisfaction were both highly rated at seven and nine respectively.

Participant C—Findings. Participant C's primary learning style dimension is behavioral. With a score of 46, Participant C is strongly influenced by her primary learning style dimension. Her secondary learning style dimension is cognitive, and with a score of 43, she is also strongly influenced by her secondary learning style dimension. One-on-one calls, email, in-person visits, live and recorded webinars, on-demand trainings, and the corporate website are communication vehicles that match Participant C's learning style dimension. Conference calls are not a match for Participant C's learning style dimension.

Exceptions. Despite email's visual component being a good match for Participant C, during her interview she did share that she "will pick up the phone and call directly if I need info that I really don't understand and I need clarified." She was the second participant to note that clarification is best via a live call as opposed to an email exchange. Conversely, conference calls are not a match for Participant C's learning style dimension unless those calls are fact-filled or allow for questions and help from the facilitator. Participant C did not indicate during her interview that conference calls were or were not a particularly effective communication method. Rather, they seem to be part of her work environment that she manages.

Adaptations. Participant C spoke extensively about her frustrations surrounding receiving information from her organization through various internet sites and a proprietary software program. She described retrieving the information by saying, "Everything is so automated and technology is great, but the burden is put on you. You have to look at the directions, read it. What's my passcode?" She also expressed frustration with the amount of information she needed to manage on a regular basis.

Participant C:

We have so much information that comes to us and we do need it. But, honestly, there's just so much of it.

Participant C didn't share any adaptations that she has created in her work environment. When pressed, she said, "I can't think of any other way you could communicate it" and "I guess the only thing I can say is it's a lot of information."

Employee effectiveness and job satisfaction. Participant C had a leader-determined effectiveness score of 5 and a self-reported satisfaction score of 8. Participant C was rated as one of the two least effective employees on the team by the team leader. Though the learning styles that moderately influenced her were a match for all but one communication vehicle, she seemed to struggle with the content that she received on a regular basis. Participant C appeared to have taken an apathetic approach to using communication tools that are challenging for her and did not indicate that she has done anything to improve her work environment. Her relatively low effectiveness score supports the researcher's theory that adaptations in the work environment lead to increased effectiveness. However, she reported a high level of job satisfaction which is contrary to the same theory.

Participant D—Findings. Participant D's learning style dimension is behavioral. With a score of 49, he is strongly influenced by his learning style dimension. He does not have a secondary learning style. He scored less than 40 in the remaining three learning style dimensions. One-on-one calls, email, in-person visits, live and recorded webinars, on-demand trainings, and the corporate website are communication vehicles that match Participant D's learning style dimension. Conference calls are not a match for Participant D's learning style dimension.

Exceptions. During his interview Participant D discussed one-on-one calls as his most challenging communication method, despite the fact that conference calls were the one communication vehicle that was not a match for his learning style dimension.

Participant D:

> Everybody is a little bit busy within the company and it's hard to get people on the phone sometimes. But they will almost…they will respond to emails.

Participant D indicated that phone calls were easier to ignore than emails, but then added that, because of technology, he felt email is easier to manage. Participant D noted that email was his preferred communication method and reiterated that one-on-one calls – because people can be very difficult to reach – were his least favorite. Conference calls, the one communication vehicle that should be most challenging, are well-received by Participant D. He described the purpose of the conference calls that he attends as fact-filled. According to his learning style dimension, the fact that the content is fact-filled can make a difficult communication method effective. Participant D said, "If we have a new product coming out or if they want to do a refresher to make sure we fully understand the product and give them feedback on how it's going."

Adaptations. Participant D identified two challenges related to communication in his work environment. The first was already discussed – the challenges associated with getting busy coworkers to answer their telephones. His adaptation for that is typically to email instead and he has had very positive results with that adaptation. His second challenge was a familiar one: lack of clarity regarding how to get additional information in a variety of situations. The specific examples he gave were all surrounding his fairly common need to get additional information for his customers. Participant D did not list an adaptation for these situations, rather he has resigned himself to the fact that the process simply has to be long and tedious. However, he did suggest that Company 1 could improve the situation by identifying a single person as an information liaison for the sales representatives.

Employee effectiveness and job satisfaction. Participant D had a leader-determined effectiveness score of 8 and a self-reported satisfaction score of 7. The strong match between Participant D's Learning Style Inventory and Company 1's communication methods does indicate that he should do well in the organization, so it is not surprising that both the effectiveness score awarded him by his leader and his overall job satisfaction are high. Additionally, with one exception, Participant D created adaptations within his environment as needed which make him more effective and make previously challenging subjects more palatable and therefore more satisfying.

Participant E—Findings. Participant E's primary learning style is cognitive. With a score of 48, she is strongly influenced by her primary learning style dimension. Her secondary learning style dimension is behavioral, and with a score of 43, she is also strongly influenced by her secondary learning style dimension. Participant E

communicates by using all of the communications available within Company 1. All communication vehicles used are a match for her primary and secondary learning style dimensions.

Exceptions. Participant E shared in her interview that, though she works well with email and the proprietary software used by Company 1 as her LSI would indicate, the timeliness of the reports is a challenge.

Participant E:

> Sales wise I don't know what my sales figures were early enough to adjust or readjust what I need to do that coming month. So we get our sales figures a month or a month and a half late.

An additional challenge related to timeliness greatly impacts her customers. She discussed the process of creating and distributing ancillary materials for textbooks. Often times instructor materials are published several months after the textbooks and sometimes they are published and distributed a few pieces at a time. This appeared to Participant E as both disorganized and lacking timeliness. Participant E claimed throughout the interview that all of the communication methods used by Company 1 worked well for her, but she did share frustrations as side notes. She spoke highly of the conference calls and likes the fact that they are typically fact-filled and led by subject matter experts.

Adaptations. Despite Participant E's claim that all of Company 1's communication methods work well for her, she does make several regular adaptations. Her LSI indicated that conference calls would work well for her if they were an opportunity for her to ask questions, and yet she specifically mentioned her reliance on peers after information is relayed for content clarification.

Participant E:

I would go to one of my colleagues and ask if they understand and then if what they are seeing is not what I'm seeing, then I'll call my boss. Sometimes you don't want to go straight to your boss because they'll think "That was so clear." and it really wasn't.

Participant E also relied heavily on recorded information, which allows her to hear information more than once. "Now we're so many people and so campus-oriented they have started recording them which is really great. Then at 10:00 at night you can go back and listen to them. It's really good." Participant E did not have an adaptation for what she shared as her greatest challenge which was the timeliness of the reports she receives. She said that she just does the "best that she can."

Employee effectiveness and job satisfaction. Participant E had a leader-determined effectiveness score of 5 and a self-reported satisfaction score of 9. Participant E was deemed one of the two least effective individuals on the team by the team leader and yet she rated her job satisfaction as almost perfect. If both scores are accurate, this would be contrary to the other scores collected. However, the researcher suspects that Participant E's job satisfaction score isn't truly a 9 for two reasons. The first is that throughout her interview she professed how well communication within her organization worked and then was quick to share examples of communication that didn't work well. Her constant positive spin felt forced, reminding me of the adage, "This works perfectly every time, except when it doesn't." The researcher's second reason for questioning her self-reported near perfect score is because when the researcher asked her what was missing – what kept her score from being a perfect 10 – her reply was "I don't give

anybody a 10. I don't give anybody a 10. Being remote, you know where you need to be and what you need to be there and that's good in itself so that's why I said a 9."

Participant F—Findings. Participant F's primary learning style is cognitive. With a score of 50, she is very strongly influenced by her primary learning style dimension. Her secondary learning style dimension is behavioral, and with a score of 47, she is strongly influenced by her secondary learning style dimension. One-on-one calls, email, in-person visits, live and recorded webinars, on-demand trainings, and the corporate website are communication vehicles that match Participant F's learning style dimension. Conference calls are not a match for Participant F's learning style dimension.

Exceptions. During her interview, Participant F was quick to admit she does not pay close attention to information delivered during webinars. She recalled a specific instance when she literally forgot she was participating.

Participant F:

> I set my phone down to go into the kitchen to get my coffee and I forgot the Webex was even going on. I came back in and my phone was going 'beep, beep, beep' and I thought "Oh, damn."

Webinars should be an effective way for Participant F to communicate with her organization and yet, because she found the content unnecessary, she struggled to remain engaged. With the exception of acknowledging that Company 1 uses conference calls, the only communication vehicle that is not a match for her learning style preference, Participant F did not speak about them again. She spoke about organizing her email, not paying attention during webinars and enjoying the infrequent one-on-one calls with her leader, but never mentioned anything positive or negative regarding conference calls.

Adaptations. Participant F did not share many adaptations for communication challenges, the researcher believes, largely because she doesn't see any communication challenges in her work environment. The one challenge she shared – her self-proclaimed "inability" to pay attention during webinars – does not seem to bother her and, in her mind, is easily remedied by viewing the recording at a later time if necessary. She seemed to mock the value of attending live webinars when she said, "They make it pretty easy for me not to pay real close attention by recording them and then sending the recording to us." The adaptation that allows many people to listen to information multiple times as needed seems to deter Participant F from participating.

The additional adaptations listed by Participant F are more accurately described as enhancements. She talked about a travel schedule that allows her to spend more time interacting with her clients in-person than is required by Company 1. Typically participants said they spent 50% of their time traveling at the most, but Participant F travels an average of 70% of her time, leaving her fewer hours in her home office than her peers. This high level of in-person contact allowed Participant F to capitalize on at least one of her preferred communication methods – in-person contact.

Participant F also discussed a robust email organization system she has in place. She had folders for each of her customers and categories for all of the company information she receives. She handled the challenge of receiving large amounts of information from multiple sources at sporadic times deftly, storing each item in its place and easily retrieving it when needed.

Employee effectiveness and job satisfaction. Participant F had a leader-determined effectiveness score of 8 and a self-reported satisfaction score of 10. Both

effectiveness as determined by the team leader and job satisfaction as reported by Participant F are extremely high. Neither score is surprising since her LSI indicated she is a good match for her company's communication methods and she listed very few challenges and many successful strategies in her interview.

Participant G—Findings. Participant G's learning style is interpersonal. With a score of 48, Participant G is strongly influenced by her primary learning style dimension. Her secondary and tertiary learning styles are cognitive and behavioral, and with scores of 45 and 41 respectively, she is strongly influenced by both. Like Participant A, Participant G scored 40 or higher in three learning style dimensions and is therefore influenced by three learning style preferences as opposed to the typical two. Having high scores in three learning style preferences significantly increases the number of communication vehicles that work well in her work environment. All communication methods used are a match for her primary, secondary, or tertiary learning style dimensions.

Exceptions. Participant G did share challenges, but only one was related to the actual communication vehicle. Like Participant C, she found navigating the proprietary software cumbersome.

Participant G:

> The information that I receive that I have to follow up next steps to get on the website to put in the three different passwords hoping that they work and the connectivity when I am on the road – hoping that it works.

Adaptations. Similar to previous participant comments, Participant G also believed situations that require clarification are best handled through a live telephone call as opposed to an email communication. She said, "I honestly believe that email is good for quick little snippits of information or questions, but there is too much that I have to read into it. You don't know the person's emotions, their train of thought when they are writing it."

Employee effectiveness and job satisfaction. Participant G had a leader-determined effectiveness score of 9 and a self-reported satisfaction score of 8. Her high scores in both categories are expected considering she has three learning style dimensions that influence her communications. And, even though she has a highly flexible learning style, she did note adaptations that she felt were necessary in her environment indicating that she proactively looks for optimal communication methods.

Participant H—Findings. Participant H's primary learning style is behavioral. With a score of 48, she is strongly influenced by her primary learning style dimension. She does not have a secondary learning style. He scored less than 40 in the remaining three learning style dimensions. One-on-one calls, email, in-person visits, live and recorded webinars, on-demand trainings, and the corporate website are communication vehicles that match Participant H's learning style dimension. Conference calls are not a match for Participant H's learning style dimension.

Exceptions. Participant H did not identify any particular communication tools that did or did not work well in her work environment. She was very focused on content and, when asked what she would improve about how she receives information from the organization, she said, "I think I would make it to where management would need to see

all of the communication to make sure that it is totally necessary." It didn't matter if she received the information through an email, a routine newsletter, or a conference call. Her primary concern was that so many departments send the same or similar information and it makes her job more difficult.

Adaptations. When the researcher asked Participant H how she handles situations where she needs information clarified, she again indicated that the communication vehicle was not the primary consideration. For Participant H, relationships are paramount.

Participant H:

> If it's someone I had been communicating with recently, I'll pick up the phone, but if it's someone that I don't normally hear from or we don't communicate with each other for some reason – not that we don't like each other, it's just that there's no reason – I'll just shoot them an email to see if there are in office.

Employee effectiveness and job satisfaction. Participant H had a leader-determined effectiveness score of 6 and a self-reported satisfaction score of 8. Company 1's team leader didn't expand on why he felt Participant H's effectiveness was a 6 – slightly more than what he rated the team on average. Because Participant H indicated she does have adaptations in her work environment and her learning style preference is a match for her work environment, the researcher expected her leader to indicate that she was more effective. Nothing in her interview or the leader's interview indicates why her effectiveness score is lower than average.

Summary Company 1

Overall, the eight participants from Company 1 that elected to participate had a clear understanding of their job expectations and individual contributions to the team. Each made adaptations – each different from the next – to meet their own learning style and work environment needs.

Several common themes emerged as the researcher talked to the remote workers in Company 1. The first was regarding email as their primary communication tool. Each employee recognized its importance and expressed a commitment to "keeping up with" the emails they received. However, the majority of the adaptations made related to remote workers going through additional steps or alternate methods to manage the data received via email because the quantity was so high. Also, related to email but particular to customer communication and situations requiring general clarification, most participants indicated in their interviews that, despite their comfort with email communication, when conversation quality was a factor, they reverted to a live phone call when possible.

Another common theme appearing in participant inventories was a dislike for conference calls as a communication method. The leader is still heavily reliant on this communication method and did not indicate any plan to eliminate them as a regular tool in the team's schedule. Table 6 summarizes Company 1 participant learning style, vehicle preferences, and leader-evaluated and employee self-report satisfaction scores.

Table 6

Company 1—Participant Learning Styles and Scores

Participant	Learning Style Preference—Primary (Score)	Leader-evaluated effectiveness Score	Self-report Satisfaction Score
Participant A	Cognitive (53) Behavioral (45) Interpersonal (40)	9	7
Participant B	Interpersonal (51) Affective (43)	7	9
Participant C	Behavioral (46) Cognitive (43)	5	8
Participant D	Behavioral (49)	8	7
Participant E	Cognitive (48) Behavioral (43)	5	9
Participant F	Cognitive (50) Behavioral (47)	8	10
Participant G	Interpersonal (48) Cognitive (45) Behavioral (41)	9	8
Participant H	Behavioral (48)	6	8

Individual Cases—Company 2 (Vendor)

Company 2 is a vendor whose purpose is to connect product owners and large retailers. The employees interviewed each described the company as "the quintessential middleman." Members of the sales team within Company 2 have largely similar roles

within the organization, but the other five support people have unique responsibilities. The least tenured non-sales employee has been with Company 2 for five years.

The researcher's initial conversations with the leader of Company 2 were challenging. He expressed a mild interest in participating and then offered one hour within a two-week period of time that he was available to meet. The researcher was not able to make that work in her schedule, so she offered to follow up in a few weeks to see if their schedules were more aligned in the new year. She anticipated she would not hear from him when she emailed him and attempted scheduling time to meet for a second time, but was pleasantly surprised when he offered three dates and times in the next week that would work for him.

When the researcher called him for our scheduled appointment, it was clear that he had forgotten that she was calling. He was driving to an appointment, but insisted that we go ahead with the interview. He eagerly answered all of the researcher's questions and shared a few thoughts of his own related to remote working and learning.

The two remote workers from Company 2 who elected to participate had very different roles in the company. Participant I had a support role and spent the majority of her time in her home office and Participant J had a sales role and spent the majority of his time in the field with his clients. Both participants responded immediately to the researcher's invitation to participate in the study and both called me instead of replying to email. Of the 19 remote employees that participated in the research, the two employees from Company 2 were the only participants to reply by phone.

According to remote worker and team leader interviews, Company 2 primarily used 10 communication methods. They included conference and one-on-one calls, email,

instant messaging, in-person visits, live and recorded webinars, the company website, a proprietary software program, and SharePoint. Table 5 outlines each of the 10 communication methods used by Company 2 and illustrates that each learning style preference is met by at least one communication method. Within Company 2 it is possible that the communication methods are used to deliver content that renders them less effective or entirely ineffective, but the effective communication vehicles are available for all learning style preferences.

Participant I—Findings. Participant I's primary learning style is interpersonal. With a score of 44, Participant I is strongly influenced by her primary learning style dimension. Her secondary and tertiary learning style dimensions are cognitive and behavioral, and with scores of 43 and 41, she is also strongly influenced by her secondary and tertiary learning style dimensions. Within Company 2, all communication methods used are a match for her primary, secondary, and tertiary learning style dimensions.

Exceptions. Participant I should have preferred to work with all of the communication methods used in Company 2 and, when asked to share a time when she misunderstood directions or completed a task incorrectly, was unable to recall a specific instance. Without pausing she replied, "I can honestly say it's never happened. We all have our jobs. We all know what needs to be done." The researcher suspected there had been a misunderstanding at some point in time, but Participant I was adamant that miscommunications simply don't happen within Company 2, so the researcher did not ask again. The researcher did, however, ask more about how she received new information and she talked about product information that she needs to relay to the sales team and vendors. She indicated that she doesn't always get everything she needs from

one source and that she sometimes has to go to the product website, a live meeting, and possibly even go as far as a follow up meeting with the individuals involved.

Participant I:

> I try and get that information off the site for what I need and then I go to the vendor that way. We'll occasionally maybe have a live meeting or something if we have to view things on both ends. Maybe they need to see what's on my screen or something.

Adaptations. Participant I did not indicate that any communication did not work well for her, consequently she was not able to share any adaptations that she has made. She did speak extensively about recording in writing what was discussed during phone calls, but not to improve her own learning. She explained, "I almost always back up a phone call with an email 'per our conversation, this is what we discussed…please confirm.'" She described her reason for written follow up by sharing what she tells her coworkers when they have experienced a misunderstanding.

Participant I:

> The team I work with will complain about things and I'll say, "Well, did you follow it up with an email?" "Well, no." You need to do that. I always reiterate: cover your ass. Because you're the only one that does what you do, so if someone gives you information and you don't document it, then guess what? It's going to be your butt.

Employee effectiveness and job satisfaction. Participant I had a leader-determined effectiveness score of 9 and a self-reported satisfaction score of 10. Company

2's leader rated his team's effectiveness lower than any of the other leaders and rarely expanded on the reasons for his scores. Participant I was an exception. He rated her a nine – the highest score he awarded. The next closest score was a seven with the average score between four and five. Participant I's satisfaction score was also high and she expressed that her job satisfaction was due largely to liking the people she worked with and being able to leave at the end of the day and not worry about work.

Participant J—Findings. Participant J's primary learning style is behavioral. With a score of 51, Participant J is very strongly influenced by his primary learning style dimension. His secondary learning style dimension is cognitive, and with a score of 47, he is also strongly influenced by his secondary learning style dimension. One-on-one calls, email, instant messaging, in-person visits, live and recorded webinars, on demand trainings, proprietary software program, and SharePoint are all communication vehicles that match Participant J's learning style dimension. Conference calls are communication vehicles that are not a match for his learning style dimension.

Exceptions. Without considering content, communication vehicles that include one-on-one calls, email, instant messaging, in-person visits, live and recorded webinars, on demand trainings, proprietary software program and SharePoint are all vehicles that match Participant J's learning style. However, disorganization and excessive or unnecessary content can make the communication unsuccessful. Participant J shared one thing that frustrates him the most does relate to content but not necessarily receiving too much information. In fact, he indicated that, in some cases, he does not get enough information. Participant J also spoke to the frustrations associated with the quality of information he often receives.

Participant J:

> I think what happens in a lot of cases, if you ask somebody a quick question on the phone, they're looking at their computer, they're thinking about a phone call they just had, they're looking at a piece of paper, they're doing something other than concentrating on what you're asking them so you get a goofy answer. You get answers that aren't thought through.

Adaptations. Participant J appeared to be well-matched with the communication methods used by the organization but he was able to speak to miscommunications that occur. When the researcher asked him for an example of miscommunication within his organization he replied, "Initially, I would say that never happens, but then as I think about it, I would say that it happens all the time. There's a real conundrum there. I guess that because of the way that I work and the fact that I've been doing it so long I've just kind of accepted the fact that if I don't understand what's going on, I better dig for some more."

Employee effectiveness and job satisfaction. Participant J had a leader-determined effectiveness score of 4 and a self-reported satisfaction score of 9. Participant J indicated his job satisfaction was rooted in being responsible for his own success – a preference aligned with his learning style preference. He felt he successfully operated independently and appeared to need few adaptations and yet his team leader indicated that his effectiveness was only a four. The team leader didn't explain why he gave any of his team members the specific scores they received, but he did mutter that Participant J "is new. He's learning."

Summary Company 2

Because of the initial scheduling challenges the researcher experienced with the leader of Company 2, she was anxious about interviewing his group. The researcher's concern was amplified when Participant I had to reschedule her interview with me and said, "I told (team leader) I was supposed to meet with you at 8:00, but he said you weren't important." The researcher was worried the entire team would commit to the research and then back out, but her concerns were unfounded. The three individuals who committed to participating completed their interviews (the leader and two remote workers) and expressed great interest in learning more about learning and the remote worker. As the researcher learned more about them, she realized they are a very close work group, even though they are geographically dispersed.

The team leader scored his team member's effectiveness lower on average than the other team leaders and yet he didn't complain or speak disparagingly about them. He was very focused on their opportunity for improvement. He expressed a desire for feedback from the group and shared that when he had asked in the past, he had been unsuccessful. The team leader also shared that he felt some members of his team are disorganized and that contributes to their lack of success. He said, "One of the challenges I've had, you know, everybody understands email. But they don't always understand how to organize." Again, like his desire for his team to be more successful in general, he expressed an interest in what he could do to help them be successful.

The team leader and Participant J both also expressed that they felt the age of the employee is a mitigating factor in a how a remote worker manages his or her work environment. Participant J said of himself, "Because of my age, I think I'm more likely to

pick up the phone and call somebody. But if I'm calling somebody much younger than I am they're probably more likely not to pick up the phone and answer." The team leader did not speak about the age of a remote worker causing differences in communication as Participant J did. Rather, he indicated there is a tendency for "older" remote workers to be resistant to change, especially related to technology. He said, "But the older ones, the ones I gave 4s and 5s to, just refuse to change. So eventually they'll be the ones that lose out." The age of the remote worker was not mentioned by any other leader or participant as a factor that should be considered. Table 7 summarizes Company 2 participant learning style, vehicle preferences, and leader-evaluated and employee self-report satisfaction scores.

Table 7

Company 2—Participant Learning Styles and Scores

Participant	Learning Style Preference—Primary (Score)	Leader-evaluated effectiveness Score	Self-report Satisfaction Score
Participant I	Interpersonal (44) Cognitive (43) Behavioral (41)	9	10
Participant J	Behavioral (51) Cognitive (47)	4	9

Individual Cases—Company 3 (Insurance Industry Analysts)

Company 3 is a small group within a large organization in the insurance industry. The team consists of 5 members in addition to their team lead. Each team member had a very similar role on the team, but to a varying extent. Their work involved extensive

research, reporting, and approval and, while they all use the same tools to research and report, each team member is qualified to approve different levels.

The researcher was referred to Company 3 by a colleague who is personal friends with Participant K. Despite the researcher's best efforts, Participant K took on some of the role of the team leader for this project. The other three team leaders invited their team to participate and each team member interested responded directly to me. Participant K emailed her four peers and copied me asking them to participate prior to the team lead sending the details the researcher provided him. Each team member replied to Participant K that they would happily participate, but only three responded to me. Participant K followed up with me to verify that everyone had elected to participate and was clearly frustrated when the researcher explained that she couldn't share who had participated and who had not.

After completing the interviews, the researcher realized each team member in Company 3 had a very clear understanding of their role and responsibilities and, in many instances, one team member was responsible for one item that affected the entire team. For example, one team member read all home office correspondence and summarized it weekly for the entire team. The other team members were entirely reliant on her completing that task and do not read any home office correspondence on their own. Knowing this, the researcher thinks Participant K took ownership of managing this project and was frustrated that she was unable to access the information she needed for her team.

Another unique aspect of Company 3 related to the team leader. When he agreed to participate in the research he seemed indifferent to the research. He even missed our

first scheduled interview because he forgot we were supposed to talk and double-booked himself. However, when the researcher spoke with him and completed his interview, he expressed an intense interest in the research and anything the researcher thought could help his team be more effective. He asked questions, shared ideas and eagerly accepted the researcher's offer to review the findings of the research once interviews were complete.

The final surprise with Company 3 came when the researcher contacted the team leader for our follow up call and he shared that the larger organization had decided to reduce the company head count and that he was one of the individuals given a sixty day notice of his termination. Unfortunately, when the researcher recapped what she had learned from the research with him, he did not have the same level of interest in the results as he had expressed in our first interview. This was understandable, of course, since he no longer managed the team that it impacted, but unfortunate as the researcher was hoping to gain additional insight from his thoughts and perceptions of what she had learned.

According to remote worker and team leader interviews, Company 3 primarily uses 11 communication methods. They included conference and one-on-one calls, email, instant messaging, in-person visits, live and recorded webinars, on demand trainings, the company website, a proprietary software program, and SharePoint. Table 5 outlines each of the 11 communication methods used by Company 3 and illustrates that each learning style preference is met by at least one communication method. Within Company 3 it is possible that the communication methods are used to deliver content that renders them

less effective or entirely ineffective, but the effective communication vehicles are available for all learning style preferences.

Participant K—Findings. Participant K's primary learning style is behavioral. With a score of 45, Participant K is strongly influenced by her primary learning style dimension. Her secondary learning style dimension is interpersonal, and with a score of 42, she is also strongly influenced by her secondary learning style dimension. All communication vehicles used are a match for her primary and secondary learning style dimensions.

Exceptions. Participant K should have preferred to work with all of the communication methods used in Company 3 yet she did face challenges. When considering content, Participant K did struggle with too much information, wasted time, and disorganization. Participant K shared an example of a time when she "filled in" on a team that was short staffed. She completed tasks that she was qualified to help with but the team operated in a slightly different manner than Participant K's team which caused her to commit a process error. When the researcher asked her what went wrong – why did she make the mistake she said, "So what happens is because we have divided work if you underwrite one single product every day, all you do is ignore what you think you aren't going to need for the other product." Participant K routinely and intentionally ignores emailed information that she deems extraneous.

Participant K also mentioned that, despite her learning style preference indicating that she prefers written communication, she is most comfortable picking up the phone in situations that need clarification. Upon further discussion, she revealed that, in her

organization, it is much faster to pick up the phone than design an email and wait for a response and, for Participant K, time and efficiency are paramount.

Adaptations. Participant K explained that the missed information in the example she shared of a miscommunication was, at least in part, a result of an adaptation. On her team, she shared the support staff "does that for us." The self-directed work environment design Participant K operated in is a good fit for her learning style preference. She acknowledged she skims long emails and may miss important information, but the team has one remote worker who has taken on the responsibility of reading mass communications in detail and sharing the pertinent information with the group. The adaptation the team created allows Participant K to only skim emails she is naturally not inclined to read.

Employee effectiveness and job satisfaction. Participant K had a leader-determined effectiveness score of 8 and a self-reported satisfaction score of 5. Company 3's leader struggled to rate the effectiveness of Participant K admitting that, personally, he liked her more than anyone else on the team. After identifying his own bias, he did rate her as highly effective. Participant K rated her job satisfaction surprisingly low despite being extremely appreciative of being able to work remotely.

Participant K:

> My pro is I'm a single mom and I have the ability to have stay-at-home mom flexibility. So if you were to ask me on that piece of the puzzle alone, I would say a 10.

Her final decision to rate her job satisfaction as a five had nothing to do with working remotely, but rather the culture of the organization.

> When you factor in that I work for a company that I would describe to you like a slave-like organization and they drive beyond reason in my mind of what they expect out of you. They are not fully staffed. We are not going to be fully staffed. The stress it adds to always be behind will always keep my job satisfaction low.

Participant L—Findings. Participant L's primary learning style is interpersonal. With a score of 48, Participant L is strongly influenced by her primary learning style dimension. She does not have a secondary learning style. One-on-one and conference calls, in-person visits, live and recorded webinars, on demand trainings, proprietary software program, and SharePoint are all communication vehicles that match Participant L's learning style dimension. Email, instant messaging, and the company website are communication vehicles that are not a match for her learning style dimension.

Exceptions. Participant L indicated that one-on-one calls from the individuals that she supports are her least favorite form of communication. Phone calls should be a preferred communication method for Participant L, according to her learning style preference, but the typical content of these calls is what is challenging for her. She explained, "You'll get calls from them and they just kind of act dumb like "Why did you rate this…?" and then I'm like, "Okay, well, the communication I sent you said…" or whatever." She indicated that, not only do they ask questions she has already answered, it is very difficult to manage the calls because they could take a few minutes or an hour. The unplanned time is challenging for her to manage.

Participant L also indicated that, even though they are a match for her learning style preference, the emails she receives are challenging for her to manage. She described

too much vague content as a detractor from her success by saying, “I think you just get so many general emails that you just delete, delete, delete, delete and you’re not really reading any of them. Then you end up missing an important email about something because of that.”

Adaptations. Participant L noted that she eagerly reaches out to the source of information if she ever has any questions. She does consider content before choosing her communication vehicle.

Participant L:

> If it’s a little bit longer question or answer, I will call them. If it’s just kind of a quick question like “Where do I find this,” we have an internal message system, so I usually IM them.

Employee effectiveness and job satisfaction. Participant L had a leader-determined effectiveness score of 7 and a self-reported satisfaction score of 8. Participant L’s job satisfaction and effectiveness scores were very similar. The anecdotal information Participant L and Company 3’s leader shared were also similar in that both indicated they did not have any complaints and there is a great appreciation for the work and work environment. When the researcher asked, Participant L could not identify anything that would specifically make her more satisfied in her job. Similarly, the team leader could not pinpoint anything specific that Participant L should improve.

Participant M—Findings. Participant M’s primary learning style is behavioral. With a score of 48, Participant M is strongly influenced by her primary learning style dimension. Her secondary learning style dimension is interpersonal, and with a score of 42, she is also strongly influenced by her secondary learning style dimension. All

communication methods used are a match for her primary and secondary learning style dimensions.

Exceptions. Participant M should have preferred to work with all of the communication methods used in Company 3 yet she did face challenges. When the researcher asked her for an example of a time when she misunderstood directions, she actually shared an example of a class for which she needed to complete pre-work. The content of the pre-work was reviewed by the presenter for the first 45 minutes of the class. Participant M was incensed at the process, describing her feelings by saying, "It just made me more angry because I'm thinking "you know, we're all professionals. We were given an assignment. It's just like being in a class. If you don't do it, you suffer the consequences for not doing your homework."

The researcher had asked for a communication that she misunderstood, but she shared an example of a process she fundamentally disagreed with. Initially the researcher thought she did not have an answer for the question so she attempted to share a story that she felt was "close enough." Upon further consideration, the researcher realized that her example is an example of a perception of wasted time and, according to her learning style preference, she would be inclined to be upset by the example she shared.

Adaptations. Participant M appeared to be perfectly matched with all of the communication vehicles used by his organization and yet she was able to easily identify communication vehicles that she does not prefer and how the content influences her preference.

Participant M:

> I don't like getting formation via the phone. As much as I like to talk on the phone during the work day, I don't because of a goal that I set for myself this year, I no longer multi-task when I am on the phone. So I am giving the person on the other end of the phone my undivided attention. The trade-off is that I'm "losing productivity."

Participant M discovered that her adaptation of giving her undivided attention to the individual or group on the telephone decreases her productivity, which is how her organization measures her success. She also shared that she would like to use Skype or a similar video component during conference calls that contain a lot of content. She felt she does not get the full value of a presentation because "sometimes they laugh and I have absolutely no idea why they are laughing because one of the doctors may have made a funny face or made a gesture and I don't see that."

Employee effectiveness and job satisfaction. Participant M had a leader-determined effectiveness score of 7 and a self-reported satisfaction score of 10. Company 3's leader spoke very highly of Participant M and of her time on his team. She moved twice and managed several significant personal issues; he indicated these things affected her job but she was open to feedback and made improvements based on feedback he shared with her. Participant M spoke about being able to work remotely as the primary reason for her job satisfaction.

Participant M:

> For a company to believe that I can work in Fishers, Indiana, from my home where I can do my laundry, in my pajamas, play with my dog, run errands and still make really good money…its' a 20.

As the researcher heard from many others, it was meaningful to Participant M that the organization she works for trusts her to work remotely.

Participant N—Findings. Participant N's primary learning style is interpersonal. With a score of 50, Participant N is very strongly influenced by her primary learning style dimension. Her secondary and tertiary learning style dimensions are behavioral and cognitive, and with a score of 42 for both, she is also strongly influenced by her secondary and tertiary learning style dimensions. All communication methods used are a match for her primary, secondary, and tertiary learning style dimensions.

Exceptions. Participant N should have preferred to work with all of the communication methods used in Company 3 but she has had challenges associated with information she received through conference calls. In one specific instance she was working with multiple people on a project, felt confident about her role and what she was expected to contribute, and then learned she had drastically misunderstood the work she was supposed to complete.

Participant N:

That was frustrating because I had done research and thought I was on the right trail and I wasn't.

Adaptations. Participant N's story was a good example of a situation that was difficult for a remote worker to create an adaptation for. To the best of her knowledge, she was doing the right thing and therefore was not looking for ways to improve.

Participant N expressed the common adaptation of reaching out to her team leader if clarification is needed with some content consideration.

Participant N:

> If it's an electronic communication that comes directly from my manager and I have additional questions, I will give him a call because it's easier and it's quicker than typing it up.

Employee effectiveness and job satisfaction. Participant N had a leader-determined effectiveness score of 10 and a self-reported satisfaction score of 9. Company 3's leader felt Participant N was as effective as she could possibly be and, not surprisingly, Participant N felt a very high level of satisfaction in her job. When the researcher asked her what would make her job perfect, she reflected that the organization had recently made a concerted effort to improve email communication and that effort had been very successful.

Participant N:

> I'm really happy I'm not bombarded with email. Like I said, I go through my emails as I get them so I don't get behind, so I would say the amount of email that I get is sufficient and I would say that the information that is conveyed to me is adequate.

In an earlier part of the interview, she did share one opportunity she felt the company had that was not as successful.

> In a big underwriter group meeting and they're throwing a lot of information at us over the course of an hour and a half and they don't follow it up with

any type of…when they don't follow it up with any paper or electronic documentation.

Participant O—Findings. Participant O's primary learning style is behavioral. With a score of 47, Participant O is strongly influenced by her primary learning style dimension. She does not have a secondary learning style. She scored less than 40 in the remaining three learning style dimensions. One-on-one calls, email, instant messaging, in-person visits, live and recorded webinars, on demand trainings, the proprietary software program, the company website, and SharePoint are all communication vehicles that match Participant O's learning style dimension. Conference calls are a communication vehicle that are not a match for her learning style dimension.

Exceptions. Participant O never identified a communication vehicle that was preferred or challenging. She did indicate that the content did matter.

Participant O:

Sometimes the quantity of information and, like I said, be more specific. I don't need to know the whole story. I need to know how it changes what I do.

This request for less information could have indicated Participant O was sensitive to her time being wasted or challenged with content that seems disorganized.

Adaptations. Participant O is heavily reliant on a team adaptation. She described it by saying, "We get these weekly process notes. Its system changes or any updates to our system management that affects our group-any group-so she goes through and picks out the most critical information and lets us know that." Participant O fully trusts another team member to read through the email communication from the organization, which she

deems excessive, and share with her what is important. She is so trusting of this process, she does not read any corporate email communication herself.

In individual scenarios, Participant O is also reliant on peers if she needs clarification.

Participant O:

> [One time she] "had to go to the other person on the team and she had to figure it out and then show me how to do it. So it was just a little bit more because it wasn't really detailed on how to do it in the email communication. I needed to be shown how to do it, basically. I learn much better visually. You know, someone showing me a system as opposed to reading about how to do it.

Employee effectiveness and job satisfaction. Participant O had a leader-determined effectiveness score of 7 and a self-reported satisfaction score of 8. Company 3's leader did not expand on why he scored Participant O the way he did, but his effectiveness score is similar to her job satisfactions score. Participant O did expand on why she chose her score.

Participant O:

> That 1-10 could vary day-to-day. Last week, it was probably a 1. I was completely overwhelmed with the quantity of work and working boatloads of overtime so the reason I would say in general that I'm an 8 is that I enjoy what I do.

Summary Company 3

Overall, the team members the researcher spoke with that worked for Company 3 were at minimum content and at best very happy with their job and the leader. The leader, though he had constructive criticism for most of them, felt they were all valuable assets to the team. What struck me most about Company 3 was how well the team worked together. The team leader and each of the team members spoke about different tasks individuals were responsible for, which was not uncommon in the research. What stood out was the level of trust and appreciation each team member expressed for the others.

When the team leader shared with me that he had been terminated from the company as part of a reduction in force, the researcher inquired about his team. He shared they had been disbanded and each was still employed, but with another group. The researcher was glad to hear they were still employed, but disappointed to hear that a group that had learned to work so well together would no longer work as a single unit. The leader confirmed, as part of his surprise at the dissolution of his team, that they were the most productive group according to the organization's measurements. Perhaps the hope is that as individuals they will be able to share their success habits and create other successful teams.

Table 8 summarizes Company 3 participant learning style, vehicle preferences, and leader-evaluated and employee self-report satisfaction scores.

Table 8

Company 3—Participant Learning Styles and Scores

Participant	Learning Style Preference—Primary (Score)	Leader-evaluated effectiveness Score	Self-report Satisfaction Score
Participant K	Behavioral (45) Interpersonal (42)	8	5
Participant L	Interpersonal (48)	7	8
Participant M	Behavioral (48) Interpersonal (42)	7	10
Participant N	Interpersonal (50) Behavioral (42) Cognitive (42)	10	9
Participant O	Behavioral (47)	7	8

Individual Cases—Company 4 (Publishing Company)

Company 4 is a publishing company that focused on a unique niche in the education industry. The participating team had seven members, six of whom operate in a remote environment. The seventh team member worked in a traditional office environment, but interacts almost exclusively with his remote teammates. Each member of Company 4 has a unique role on the team and their contributions are managed by their team leader and synchronized through a proprietary software program created and used by their entire organization. When speaking with the team, each had a clear understanding of their role and was surprisingly well-versed in the responsibilities of the other team members as well.

According to remote worker and team leader interviews, Company 4 primarily uses 12 communication methods. They included conference and one-on-one calls, email, instant messaging, in-person visits, live and recorded webinars, on demand trainings, the company website, a proprietary software program, SharePoint, and surveys. Table 5 outlines each of the 12 communication methods used by Company 4 and illustrates that each learning style preference is met by at least one communication method. Within Company 4 it is possible that the communication methods are used to deliver content that renders them less effective or entirely ineffective, but the effective communication vehicles are available for all learning style preferences.

Participant P—Findings. Participant P's primary learning style is cognitive. With a score of 54, Participant P is very strongly influenced by her primary learning style dimension. Her secondary and tertiary learning style dimensions are behavioral and interpersonal, and with scores of 48 and 42 respectively, she is also strongly influenced by her secondary and tertiary learning style dimensions. All communication methods used are a match for her primary, secondary, and tertiary learning style dimensions.

Exceptions. Participant P should have preferred to work with all of the communication methods used in Company 4 yet she did face challenges. She primarily shared examples of email communications that were not effective. Participant P shared two examples: the first was a string of email communication in which not enough information was shared and the second was a single email communication that she deemed ineffective because there was too much extraneous information.

Participant P:

> It's a lot, but then all of the self-help gurus say to just do what's most important and all the rest needs to fall off your plate. And that's what I try to do. I don't want to read boring CYA emails from people.

Adaptations. Outside of email communication, Participant P did struggle with the content of other communications. She relied heavily on the proprietary software provided by Company 4. The software allowed team members to review and update project information in real time. When tasked with a project that she didn't know how to approach, Participant P loaded the information into the software program and had her team contribute information that helped her gather the information she needed. At the time of her interview, the project was still in development but she was confident in the progress she was making. She described her actions by saying, "I took on some leadership as well." She approached the challenge as an opportunity to exercise her organization and leadership skills.

Employee effectiveness and job satisfaction. Participant P had a leader-determined effectiveness score of 8 and a self-reported satisfaction score of 10. Company 4's leader explained she rated Participant P's effectiveness as an eight because "when it comes to managing internal politics and interpersonal relations…personally, she is very insecure. And the way that she's been taught to manage people and relationships is to manipulate." She received such a high effectiveness score because she is "technically sound." Participant P cited the variety in her work and the ability for her to work remotely as the primary reasons for her job satisfaction.

Participant Q—Findings. Participant Q's primary learning style is cognitive. With a score of 48, Participant Q is strongly influenced by his primary learning style

dimension. His secondary learning style dimension is behavioral, and with a score of 44, he is also strongly influenced by his secondary learning style dimension. One-on-one calls, email, instant messaging, in-person visits, live and recorded webinars, on demand trainings, a proprietary software program, the company website, surveys, and SharePoint are all communication vehicles that match Participant Q's learning style dimension. Conference calls are communication vehicles that are not a match for his learning style dimension.

Participant Q was a unique contributor to this study. He was the only participant who works in a traditional office environment. He worked with a team that is geographically dispersed, so his daily interactions were with individuals that are remote.

Exceptions. Participant Q shared that he is comfortable with all communication vehicles in his work environment, but indicated that the decision making processes within Company 4 can be challenging. "I very much enjoy making decisions and it can sometimes be frustrating to me that I have to get so many people involved or get so much buy-in from coworkers before I can do something."

Adaptations. Participant Q expressed that, even though his work environment requires a lot of written communication, he does like to speak to people live when he can. He expressed that relationships are important to him and that live conversations are the best way to maintain those relationships.

Participant Q:

> My personal preference is face-to-face or talking with somebody. Not that I feel more comfortable with it, but these days with emails which I feel can be kind of impersonal I kind of prefer in a lot of times to pick up a phone instead

of send an email or to walk over to somebody's office if they are in the building rather than send an email.

Employee effectiveness and job satisfaction. Participant Q had a leader-determined effectiveness score of 7 and a self-reported satisfaction score of 8. Company 4's leader and Participant Q cited the exact same area of development for effectiveness and satisfaction respectively. Both felt that because Participant Q has been in his role for less than a year, he still has significant room to improve.

Participant Q:

It's not a 10 because I feel like I still have a lot more to learn about the position before I become as proficient and as effective as I would like to be in this position.

Participant R—Findings. Participant R's primary learning style is affective. With a score of 43, Participant R is strongly influenced by her primary learning style dimension. Her secondary learning style dimension is cognitive, and with a score of 41, she is also strongly influenced by her secondary learning style dimension. Email, instant messaging, in-person visits, live and recorded webinars, on demand trainings, the company website, a proprietary software program, SharePoint, and surveys are all communication vehicles that match Participant R's learning style dimension. Conference and one-on-one calls are not a match for her learning style dimension.

Exceptions. Even though written communication is her expressed communication preference and a match for her learning style, Participant R shared that excessive email communication is what she would change in her work environment.

Participant R:

I would change being cc'd on unnecessary email. If somebody sends an email, copies 6 people in it, everybody copies all so by the time you get to it you've got to work your way backwards through everything only to find out it has nothing to do with you.

Participant R did identify that communicating via the telephone was her least favorite communication preference, though not specifically conference calls as her learning style preference indicated. Her role on the team does require her to reach out to new contacts outside of the company, so she indicated she has to communicate a fair amount over the phone. She does consider content when deciding whether or not to connect via the telephone. "If it's a first or second contact then it's via email. It's when we're really getting to brass tacks that we really get on the phone."

Adaptations. Participant R had previously owned her own business and spoke about how the skills she developed when she was self-employed transferred to her current work environment.

Participant R:

I am a digger. I will just ask until I get the answer that I need. I have absolutely no issue emailing and calling or IMing until I find that person that's going to give me the answer. I learned that from 12 years of being on my own. You want it done, you better figure it out or find someone who can do it for you.

She spoke very little about the tools she uses to communicate. Rather, she described the importance of persistence and ingenuity. Participant R was the only participant that shared that she took continuing education classes strictly to improve her own job performance. She described a class she took that taught her how to leverage her information on LinkedIn and, as she described it to me, it was clear she committed herself to learning from the class and applying what she learned to her work environment.

Employee effectiveness and job satisfaction. Participant R had a leader-determined effectiveness score of 6 and a self-reported satisfaction score of 8. Company 4's leader admitted that Participant R was, on a personal level, the team member that she enjoyed working with the most, but her effectiveness was lower than average. She commended her for creating a lot of activity but indicated that she falls short in her ability to plan effectively. Citing her past experience as a small business owner as part of the problem, the team leader explained, "she comes from a world of a business that's 3 million dollars or less a year, right? And you operate differently. You're a little more flexible. You can make different decisions. You can take risks and invest in projects. The ROI is a much different expectation in a family owned business. You're happy if you're able to give yourself a paycheck at the end of the week." She went on to explain that, even though Participant R understands that concept she still falls into the same habits of planning for a small business.

Participant R shared that her score of eight was because she does enjoy the challenges of her job. However, she said she is always looking for ways she can improve so she does not believe she will ever be in a job that is 100% satisfying.

Participant S—Findings. Participant S's primary learning style is behavioral. With a score of 43, Participant S is strongly influenced by her primary learning style dimension. Her secondary learning style dimension is cognitive, and with a score of 42, she is also strongly influenced by her secondary learning style dimension. With the exception of conference calls, all communication methods used are a match for her primary and secondary learning style dimensions.

Exceptions. Except for conference calls, Participant S should have preferred to work with all of the communication methods used in Company 4. When asked about challenges, she specifically mentioned the disorganization surrounding email communication, not conference calls.

Participant S:

> Don't keep adding addendums. Wait until you have all of the information and then send it to me. Don't send me piecemeal information. Don't send 14 emails with added information to something that you've already sent me. It gets lost and then I don't pay attention to it. I'll delete it. I've done that!

Adaptations. Participant S quickly identified a challenging scenario and shared the adaptation she implemented. She was given the task of "thinking outside the box" to create a way the team could complete a specific task in-house so they could avoid the fees associated with external vendors. There was very little structure or guidance that could be provided because, by the nature of the task, no one knew what the final product should look like. During the process, Participant S began to doubt what she was doing and asked for feedback from her team leader.

> I was like "Sandra, is this the right path?" "Yeah, just keep going." But I knew it wasn't, so what I did, what I had, I sent it to two of my colleagues. Their feedback was a game changer. It changed everything. Because I didn't rely solely on the feedback from my boss, I went to my colleagues who I have established rapports with.

Participant S was satisfied with her final product, but acknowledged that her work environment was not designed to support her success on the project. She had to take specific, unplanned action to acquire the feedback she needed.

Employee effectiveness and job satisfaction. Participant S had a leader-determined effectiveness score of 8 and a self-reported satisfaction score of 10. Company 4's leader identified the effectiveness of Participant S as an eight and emphasized her appreciation for her ability to "think outside the box." The same phrase was used by Participant S and two other team members to describe her contribution to the team, so the researcher suspects it is a topic they have discussed as a team on at least a few occasions. The team leader did not share specifically what Participant S could improve, only her great appreciation for her creative thinking.

Participant S was quick to identify her job satisfaction as a perfect 10, but she gave a unique answer as to why. She expressed a deep appreciation for the opportunities she has been given and the people with whom she has worked. Whereas most workers talked about fulfilling work or the convenience of working remotely, she seemed to attribute her success and happiness to the relationships she has had with others.

Participant S:

> When you look back at just the kindness of strangers if you will. Because I didn't go to college. And I look back and I had no idea. He opened up a world to me that from that moment on I just was interested in business and always read and was always just learning about it because it was just so fascinating to me.

Summary Company 4

The researcher had the opportunity to speak with the team leader for Company 4 after her initial interview and she expressed an intense desire for her team to be successful. She was eager to learn what the researcher thought they could do to improve their contributions to the larger organization and at one point asked me, "So, you talked to everyone. Can you tell me if we'll be successful?" While she said so in jest, it seemed she was genuinely concerned about her team's current and future state.

The researcher shared with her, as she did with other team leaders who were interested, the aggregate results of the interview with the team. The researcher was not able to disclose who elected to participate, though some participants shared that information on their own. The researcher was able to share common themes that emerged during the interviews.

Aside from the learning style preferences on her team, the researcher was also able to share that several participants expressed an interest in being more involved in team webinars. This evoked a hearty laugh from the team leader and she explained,

> the interesting thing is that every meeting, everyone is given an opportunity to do "shares." So I send out "please if you have something to share, please add to the PowerPoint presentation." Everybody is asked to participate. It's not managers

only. It's not a hierarchical thing. And I am telling you, 9 times out of 10, there is nothing to share. And yet those same people are the people who will say "I'm not engaged" or "I wasn't asked to participate.

We discussed that this may be worth exploring since she believes she encourages participation and is usually ignored and her team wants to participate but feels they are not given the opportunity.

Table 9 summarizes Company 4 participant learning style, vehicle preferences, and leader-evaluated and employee self-report satisfaction scores.

Table 9

Company 4—Participant Learning Styles and Scores

Participant	Learning Style Preference—Primary (Score)	Leader-evaluated effectiveness Score	Self-report Satisfaction Score
Participant P	Cognitive (54) Behavioral (48) Interpersonal (42)	8	10
Participant Q	Cognitive (48) Behavioral (44)	7	8
Participant R	Affective (43) Cognitive (41)	6	8
Participant S	Behavioral (43) Cognitive (42)	8	10

Summary

It became clear within a small number of interviews that the communication vehicles and learning style preferences would not be the only important links to remote worker effectiveness and job satisfaction. The content of the communications quickly

became a major consideration – in many cases surpassing the communication vehicle in importance.

The researcher anticipated that a pattern would emerge when she collected the learning styles, effectiveness and job satisfaction scores. She expected high scores in both effectiveness and job satisfaction would be found with remote workers who worked in an environment in which communication methods met their learning style preference. However, the content of the communication proved to be a considerable influencing factor, sporadically causing communication vehicles that were not a learning style match to be successful and vice versa. Because of the additional consideration of content, no pattern emerged.

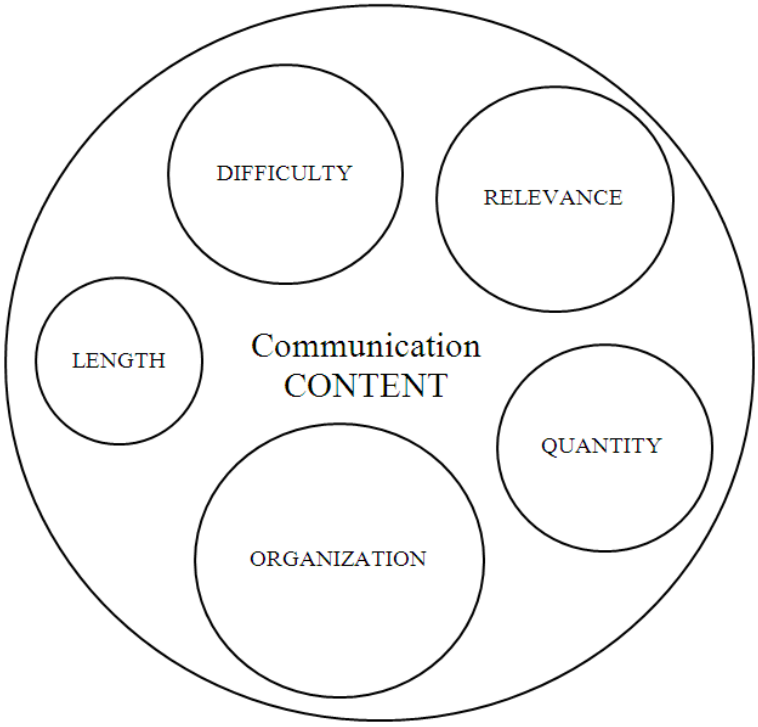

Figure 2. Factors that impact communication content. Many individual and combinations of factors can work to make communication either more or less valuable to the learner. The difficulty of the content, perceived relevance to the learner, quantity of information (especially in a single communication), organization and overall length of any communication can positively or negatively impact the effectiveness of the communication.

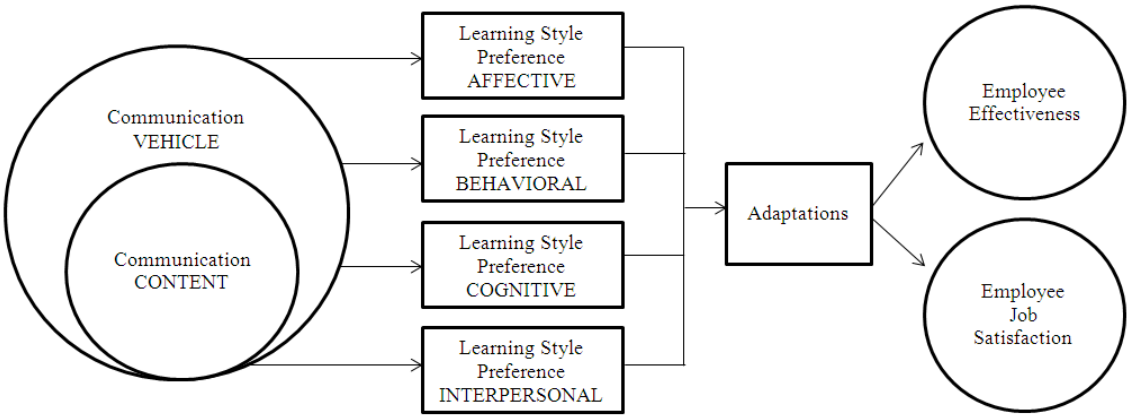

Figure 3. The process of information delivery to remote workers. The researcher's new theory considers the vehicle *and the communication content* in which information is delivered. When a remote worker receives the information, they will process it using their learning style preference. The remote worker then may or may not make an adaptation in their work environment to better understand and apply the information they have received. Finally, the understanding and application of the information they have received contributes to their overall effectiveness and satisfaction.

Table 10

Summary of Units of Analysis by Company

Units of Analysis	Company 1	Company 2	Company 3	Company 4
Communication Methods	conference and one-on-one calls, email, in-person visits, live and recorded webinars, on demand trainings, the company website	conference and one-on-one calls, email, instant messaging, in-person visits, live and recorded webinars, the company website, a proprietary software program, SharePoint	conference and one-on-one calls, email, instant messaging, in-person visits, live and recorded webinars, on demand trainings, the company website, a proprietary software program, SharePoint	conference and one-on-one calls, email, instant messaging, in-person visits, live and recorded webinars, on demand trainings, the company website, a proprietary software program, SharePoint, surveys
Employee Learning Style	Behavioral(3) Cognitive(3) Interpersonal(1)	Behavioral(1) Interpersonal(1)	Behavioral(3) Interpersonal(2)	Affective(1) Behavioral(1) Cognitive(2)
Adaptations Made by the Employee	follow up calls, email organization	published information (i.e., website)	subject matter experts on team, one team member summarizes emails for all	follow up calls, peer feedback, written materials, proprietary software
Average Employee Effectiveness	7.125	6.5	7.8	7.25
Average Employee Satisfaction	8.25	9.5	8	9

With the exception of Company 2, the majority of the remote workers who participated in the study expressed high levels of job satisfaction and was given high

effectiveness scores by their team leader. Company 2 only had two participants and, while both registered high satisfaction scores, only one was deemed highly effective by the team leader. While the correlating high scores do support the researcher's theory, the small number of low scores does not allow the opposite to be proven.

The four companies used a wide range of communication methods and all 19 participants had access to several communication methods that met their learning style preference. The researcher's theory was supported by the overall effectiveness of the remote employees, but again, without ineffective participants, the opposite was not proven.

Chapter Five

Discussion

Summary of the Study

The researcher theorized that a remote worker's learning style preference, and the extent to which that preference is met by the organization they work in, would influence the remote worker's effectiveness and job satisfaction. Initially, the researcher also theorized that some remote workers would create adaptations in their work environment that would increase both their effectiveness and job satisfaction.

Early in the interview process the researcher realized that, in addition to learning style preference and adaptations, the content that was being communicated to remote workers also had to be considered. The participants did express a like or distaste for specific communication vehicles, but more often they spoke about the content either making or breaking their learning opportunity.

The researcher's original theory was partially supported, but proven to be incomplete. Participants did often express a penchant for communication vehicles that aligned with their learning style preference. However, more often participants spoke about the content of the communication when they described how effective a specific was within their organization.

The Researcher's Revised Theory

A remote worker's learning style preference, and the extent to which that preference is met *through the selection of communication vehicles and the content of the communication created by the organization they work in,* will influence the remote worker's effectiveness and job satisfaction. The researcher still theorizes that some

remote workers create adaptations in their work environment that increase both their effectiveness and job satisfaction.

Suggested Changes for Leaders and Common Remote Worker Adaptations

Many organizations would assume that dramatic or expensive measures have to be taken to ensure the success of remote employees. A further assumption may be that advanced, expensive technology is the best investment an organization should make if the goal is to support remote workers. The researcher did not find that technology was a factor that participant's discussed– at least not in terms of the best use of resources to improve communication, learning, job effectiveness and job satisfaction for the remote worker. Rather, basic technology like a computer with an Internet connection and a cell phone seemed to be a standard component of the remote work environment.

Amount of content. The most common hindrance identified by the 19 participants the researcher interviewed was their organization's tendency to send them too much information. Many of the remote workers even indicated they felt the abundance of communication was sent with good intention, but it didn't make it any more manageable. The implication of too much information in an email, conference call, or any communication to a remote worker is an increased chance of disconnection by the remote worker from the person delivering the information.

Remote worker adaptation. The most successful adaptations shared during the research involved a "point person" on the remote team who was responsible for reading the excessive communications, extracting the relative information, and disseminating the condensed version to the team. For this approach to work, the wider team must trust the point person to accurately relay the important information.

Potential leader change. The adage "less is more" should be remembered by leaders communicating with remote workers. The tendency to share as much information as possible is often exacerbated in the remote work environment in the leader's attempt to connect with the remote worker.

A conscious effort by the leader to only share pertinent information and to share that information in a concise manner will help remote workers receive a manageable amount of information. Review of remote communications for clarity and brevity by a peer would be recommended as leaders adjust to the modification in their communication method.

Organization of content. Participants also indicated that, no matter what communication vehicle was used, if content is poorly organized it becomes more burdensome than helpful. The most obvious challenge with this element of remote communication is that the "best" order of any communication is subjective. Not only will individuals have their own opinion on what should be presented when, but that opinion could vary from person to person depending on their role in the organization.

Remote worker adaptation. If remote workers believe routine content is unorganized, they are likely to have one of two responses. Either they will find a way to navigate the content, despite the fact that it is not aligned with their thought process, or they will disregard the information entirely. Remote workers are especially vulnerable to the latter approach if they do not perceive value in the content of the communication.

The most successful adaptations shared during the research involved remote workers who created their own electronic email or file organization system. The most

common example is a detailed list of file folders and the habit of immediately storing the email appropriately.

Potential leader change. Like the amount of communication, the organization of content can often be improved with the help of a review for clarity and organization. After taking the time to consider a logical flow, a coworker's second opinion may uncover alternate approaches or additional ideas that can improve the overall design.

Additionally, any time a leader can use a consistent model when delivering information, the chances that the remote will understand the content increases. For example, if every webinar begins and ends with an opportunity to ask questions, the remote worker will learn that there is consistently an opportunity to clarify information. That learning allows the remote worker to be prepared to maximize their own understanding of the information by asking questions.

Preparedness of facilitator. Facilitators appeared to be underprepared was another common challenge. This can occur in live or written communication. An unprepared facilitator of a conference call could be easily identified by verbal pauses used during their presentation, backtracking after presenting material, or simply not knowing or not having required information. Lack of preparedness in written communication tends to be more subtle, but has the same negative impact on remote workers. In written communication, unpreparedness manifests as follow up emails and addenda. In some cases the facilitator may admit, "I forgot to attach this document."

In other cases it may simply be additional emails, instant messages or shared files that arrive without apology after the initial message was delivered. Similar to disorganized content, the disjointed nature of an unprepared facilitator's presentation

often results in the remote worker seeking other ways to gather the information or disconnecting from the facilitator entirely.

Remote worker adaptation. The most successful adaptations shared during the research involved remote workers identifying alternate resources for information they expected to gather from the facilitator. Several remote workers indicated there are facilitators they regularly work with that are consistently underprepared and the remote workers adapt by routinely gathering information from other sources prior to their meetings.

Potential leader change. Not surprisingly, the most effective way for a leader to appear prepared is to prepare sufficiently for all communications. The most common obstacles that prevent leaders from preparing appropriately include a lack of time, stress or the absence of a solution for a given situation. Self-awareness on the part of the leader can help ensure that these external factors do not cause remote worker communication to be negatively impacted. A leader's commitment to spending the appropriate amount of time and effort preparing will increase their confidence in their communication and therefore increase the remote worker's confidence in the message.

Frequency of communication. Remote workers also indicated that the frequency with which they receive communication can be challenging. Other than underprepared facilitators mentioned in the previous section, excessive communication seems to come from two primary sources. The first is a result of a work environment that encourages everyone to share everything with everyone. The most common version of this is when people begin "copying" entire teams on email communication, even if only a few team members need the information. The second is leadership in an organization attempting to

keep remote workers connected by sending frequent organizational updates or company newsletters.

Both examples of too frequent communication seem to come from the good intentions of leaders and employees within the organizations, but their goal of strengthening the connection with the remote worker seems to have the opposite effect. Remote workers, unable to manage the quantity of data, are inclined to ignore it all.

Remote worker adaptation. The most effective adaptation shared during the research was teams assigning a specific team member to manage communications that were deemed routinely excessive. That team member reported what they identified as pertinent information to the larger team.

Potential leader change. Leaders have the opportunity to appropriately manage the frequency of communication by preparing, as previously discussed, but also through tracking communication. When possible, communication should be sent routinely and with consistent design to help the remote worker manage their expectations. For example, departmental updates could be sent every Monday or on the last day of the month. The communication design could always have the same categories, updated to reflect what the remote worker needs to know to be effective in their role.

Limitations

The purpose of this study was to examine how the degree to which an organization's communication methods align with an individual employee's learning style impacts the overall effectiveness and satisfaction in their role. A remote worker will be influenced to varying degrees by several other factors including self-worth levels (including self-concept and self-esteem), bio-physical influences (such as health concerns

or physical or mental disabilities), environmental systems (such as culture or society), social teachers (including teachers, parents or coaches), and emotional anchors (such as negative or positive past life experiences). This study assumed that the five factors other than learning style that influence an individual's success fall within the normal range and do not negatively impact the remote worker.

Additionally, the research is a case study. A case study cannot prove a theory, so the research will contribute to the existing body of knowledge without definitively proving or disproving the theory.

The Learning Style Inventory (LSI) used to determine each participant's learning style was based on the Personality Style Indicator (PSI). CV Research paired sample t-tests and discovered the pretest and posttest were consistent for each question in the PSI with a 95% confidence interval. Though CV Research determined the PSI to be a valid instrument and the LSI is based on the PSI, separate testing on the LSI was not conducted.

The study primarily uses anecdotal information gathered from interviews in conjunction with participants' learning style preference. Measurable information such as the amount of and frequency of use for each type of communication received by the participant was not gathered. Rather, the study relied on the value of the remote worker's descriptions of their learning opportunities to accurately evaluate their work environment.

The study only included four companies and, though that quantity meets the requirements of case study research, it could still be considered a limitation. Similarly, the companies that participated and all of the remote workers reside in the United States. One of the benefits of remote employment is the ability to work from anywhere –

including multiple countries – but those remote workers could face challenges unique to remote workers in the United States.

The researcher interviewed 19 remote workers and asked each remote worker to rank their own job satisfaction on a scale of one to ten. The researcher also interviewed the 4 leaders that managed the remote workers and asked them to rank the remote workers' effectiveness on a scale of one to ten. The average satisfaction score by company ranged from 8 to 9.5 and the average effectiveness by company ranged from 6.5 to 7.8. The random sample of remote workers that participated in this study were both highly satisfied in their job and highly effective. The small number of unsatisfied or ineffective remote workers caused the researcher's theory to primarily be explored in the work environment of satisfied and effective workers. The opposite environment was not explored.

Research results may also vary depending on the industry of the remote workers. The research encompassed three industries because two companies were in the same industry, though the remote workers had very different roles within their organizations. Research results may be different if other industries are included.

In the research only a small number of remote workers from two of the four companies participated in the study. A greater percentage of remote workers from the chosen companies may impact the results.

Implications for Organization Development Practitioners

Many organizational development theories can be applied to the remote work environment. In many cases, while research that applied to a traditional work environment is applicable to the remote environment, there may be additional

considerations with the remote work environment. For example, Argyris' (2002) theory of single and double loop learning is equally relevant in a remote work environment. However, a leader or researcher would likely need a different approach to observe the learning and changes since the common element of visual observation is not a viable option.

Trust is a common consideration in organization development work. The need for trust is heightened in the remote work environment because many of the cues that coworkers and organizational leaders use to establish trust are not as prevalent or they may not be available at all. For example, in a traditional work environment, trust can be built casually through conversations at the water cooler or in the elevator. An employee may automatically trust a coworker more when she sees him arrive for work early or stay late. These are all examples of trust and relationship building occurrences that are not available to remote employees.

Trust can also be broken if employees believe a coworker is not completing the tasks for which they are responsible to the extent that they should. Remote workers are especially susceptible to this because, if communication channels are not sound, they are at greater risk for misunderstanding what is expected of them.

If an organization with a remote workforce wants to be a learning organization, the same concepts that Argyris (2002) encouraged for management and adaptation, Schein (2003) for culture, and Kolb (2005) for experiential learning can and should be applied. Unfortunately, it is common for organizations that explore these organization development paths to forget remote workers or attempt a blanket application of concepts without considering their unique environment.

Future Research Recommendations

As the need and interest in creating and improving remote work environments increases so does the need for further research surrounding remote worker communication and learning. This study explored part of a desirable and rapidly growing workplace design.

Small adjustments could equal big improvements. There is an opportunity for further research surrounding small changes in the remote work environment. A current state could be measured, a small change such as assigning one employee to streamline content delivered could be applied, and the future state could be assessed for employee effectiveness and job satisfaction.

Interview less experienced or less successful remote workers. The random sample of remote workers interviewed by the researcher was seasoned in their roles and performing at an acceptable level according to their leaders' standards. Further research could explore the learning styles and job satisfaction of remote workers who are ineffective in their work environment.

Measure quantifiable research elements. Similar research could be conducted with the addition of other measurable key metrics. Remote workers with varying tenure in their organization, job duties that are quantifiable, or the amount and size of information shared with remote workers could be measured and reported as possible influencing factors in a remote work environment.

Make team adaptations. The researcher uncovered multiple instances in the research where an adaptation was shared, but it was a tool or technique that a remote team developed. Further exploration of remote teams could uncover valuable details

regarding what makes some geographically dispersed teams highly functional and interactive and others are not.

Research international remote teams. This research was limited to remote workers within the United States, but there are many teams that operate remotely within other countries or across multiple countries. Unique challenges remote workers in those environments face may be associated with culture, cultural differences, or logistical issues associated with time zones and could be explored in a future study.

Final Thoughts

For decades organizations have been employing remote workers with varying degrees of success. The archetypal traveling salesman may be one of the most familiar early applications of organizational methods operating outside a traditional office environment. Over time, other industries, through necessity or ingenuity, created positions that sent employees out of their brick and mortar office and into the field.

As technology improved, organizations were able to more easily stay connected to remote workers and therefore create remote work environments that allowed the employee to stay closer to the customer or work with field employees across greater geographic areas. The improvement in technology also enabled organizations to allow employees with a need or desire to be remote workers, like working parents or employees with physical limitations, to work effectively from their homes.

The number of organizations supporting remote workers and the raw number of remote workers continues to increase. The cost benefits for the organization, opportunity to recruit internationally, and increase in employee satisfaction is being discussed more and more often as every industry looks for ways to increase lean operations. But within

the rapid growth of this exciting new work environment is a quiet danger. As the environments employees have grown accustomed to learning in changes, there is a risk that organizations may not realize how their communication and learning opportunities need to change as well.

If an organization does not choose to address the changed environment, they risk losing their competitive edge. To be successful in any industry an organization has to outperform and outlast the competition. An organization cannot expect its employees to outperform the competition if they are not able to learn effectively. If an organization does not elect to identify the learning style of each remote employee it certainly does not guarantee they will fail. However, if an organization pays no attention to how the remote employees are learning, the risk that learning and communication is not being maximized certainly increases.

Feast or famine. For those who don't believe that exploring best practices for learning in a remote environment is worth exploring, the researcher will offer a metaphor to help demonstrate the value. When thinking about providing a team or remote workers with a plethora of information, imagine they are sitting down to an elaborate seven course meal. Before each worker sitting at the elegant table is what you might expect: cloth napkins, water, wine, and side plates to soon harbor wonderful foods. Now imagine that, instead of the full array of utensils, they each only have a spoon. When the first course of soup arrives and they are all equipped to enjoy the first dish, the table will remain harmonious. They may also enjoy the bread, despite the challenges associated with adding butter, as they break it in their hands. As more and more pieces of the feast arrive, the dinner guests will find themselves unable to easily enjoy the salad, steak, and side

dishes without the proper utensils. Eventually dessert may be enjoyed with the single utensil they have received, but many of the desirable elements of the feast will be out of reach. Some of the dinner guests may have protested immediately, asking for exactly what they needed to enjoy each part of the meal. Others may have attempted to make what they had work, no matter how difficult the process. Another few guests may have said nothing, assuming they missed something; that their gracious host wouldn't have left them ill prepared for the meal. Still others may simply leave the table, wanting nothing to do with a meal that is so poorly executed.

Remote employees face the same challenges and feelings and often have the same reactions. If an organization provides communication and learning opportunities in a manner that does not allow the employee to reap the full benefits of the information, the remote worker could react a number of different ways. Many of those reactions – like the dinner guests who try to make the most of their single utensil instead of asking for additional tools – are not productive.

If an organization wants to survive in today's marketplace, it is has to outperform and outlast its competition. In order for that to happen, operating costs have to be kept at a minimum. Employees need to be satisfied in their jobs. And, most importantly, employees need to be able to learn and contribute to the organization.

Managing a remote workforce is cost efficient and employees trusted to work remotely typically report high levels of job satisfaction. The final consideration – learning and contributing to the organization – is the area where the most organizations have the greatest opportunity for improvement. Small changes can often provide an

opportunity to improve the remote work environment leading to more satisfied and effective remote employees.

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Appendix A

Sample Invitation to Participate

<emailed to remote employees by leader>

You have been invited to participate in a study conducted by a Doctoral Candidate at the University of St. Thomas. Amy Jauman is interested in learning more about the learning styles of individuals that operate in a remote work environment. She is currently seeking volunteers to participate in a study that will explore how the learning style of an employee and the alignment of that learning style with organizational communication methods impacts the employee.

Participation in this study is strictly voluntary. I will not be notified of who chooses to participate and who declines. Any employee who chooses to participate will be given a pseudonym in all documentation related to the research.

Participation in this study includes completing a 60 minute confidential interview with Amy Jauman and a 16-question Learning Style Inventory.

Benefits of Participating in the Study

As a participant of the study, you will be given a learning style assessment. Amy will review the results of your assessment with you and discuss how your learning style preference impacts your work environment.

This is a great opportunity for each of you to learn more about yourself. Again, participation is strictly voluntary and all information shared will remain confidential.

If you are interested in more information about participating, please contact Amy Jauman at jaum4838@stthomas.edu or call her at 763-913-1495.

Sincerely,

Appendix B

CONSENT FORM
UNIVERSITY OF ST. THOMAS
How the Alignment of an Organization's Communication Methods and a Remote Employee's Learning Style Impact the Effectiveness of the Remote Worker

Please read this form and ask any questions you may have before agreeing to participate in this research endeavor. You have been invited to participate in this study because you are a remote employee that can provide valuable information to the researcher regarding how individual learning styles impact remote worker effectiveness.

This study is being conducted by me, Amy Jauman, Doctoral Candidate of Organization, Learning and Development, University of St. Thomas. My research advisor is Dr. John Conbere, Director of the Doctorate in Organization Development Program at the University of St. Thomas.

Background Information:
The purpose of this study is to examine learning styles specifically as it relates to individuals operating in a remote work environment.

Procedures:
If you agree to be in this study, I will ask you to do the following: (a) Participate in a 60 minute interview. (b) Share examples of how your organization shares information with you. (c) Complete a 16 question Learning Style Inventory.

Risks and Benefits of Being in the Study:
The study has some potential risks. Information will be gathered about your work habits and contributions to the organization. Your answers will be kept confidential and you will be given a pseudonym to protect your identity. All data will be kept confidential and secure in locked files or a password-protected media file. In the event that a transcriber is employed, she will be asked to sign a confidentiality agreement.
There is no financial compensation for participating in this study.

Confidentiality:
The records of this study will be kept private. I will not be sharing the information that I collect with you, nor anyone else. In any sort of report or article I publish, I will not include information that will make it possible to identify you in any way. Audio tapes or printed copies of transcriptions will be kept in a locked file in my home. Voice recordings will be erased and or destroyed within one month of the end of the study when my dissertation is approved for publication. Electronic copies of the transcription will be saved on a password protected personal computer. Your identity will be protected by use of a code known only to myself. All materials will be destroyed following the completion of my successful doctoral dissertation.

Voluntary Nature of the Study:
Your participation in this study is entirely voluntary. Your decision whether or not to participate will not be known to or in any way affect your current or future relations with your organization. If you decide to participate, you can choose to "skip" or not answer any of the interview questions. You are free to withdraw at any time without penalty. Should you decide to withdraw, data collected about you will not be used in this study.

Contacts and Questions:
My name is Amy Jauman. You may ask any questions that you have now. If you have questions later, you may contact me at 763-913-1495. My advisor at the University of St. Thomas is Dr. John Conbere and he can be contacted at 651-962-4456. You may also contact the University of St. Thomas Institutional Review Board at 651-962-5341 with any questions or concerns.

Please keep a copy of this form to keep for your records.

Statement of Consent:
I have read the above information. My questions have been answered to my satisfaction. I consent to participate in this study and to be audio-taped during interviews or focus groups. I am at least 18 years of age.

Signature of Study Participant
Date

Printed Name of Participant

Signature of Researcher **Date**

Appendix C

Participant Interview Guide

1. Consider a typical work week. When and how do you get new information from the organization? Please share specific examples.
   Probes: if not mentioned ask about email, paper, phone, other

2. When you consider all of the new information that you receive (sporadically or on a routine basis), what are you most comfortable working with?

3. What information is the most challenging to work with?

4. Describe a time when you were asked to complete a task and you either didn't know where to start or you completed the task incorrectly. Specifically describe how you received direction and on what points you were not clear.
   Probes: if necessary, remind leader that this could be big, small, simple, complicated, one-time or repetitive tasks

5. If you find yourself in a situation where you don't understand directions you've been given, how do you get clarification?

6. If you could change one thing about how you receive information from your organization, what would you change?

7. On a scale of 1 to 10, with one being "incredibly unsatisfied" and 10 being "incredibly satisfied", describe how satisfied you are in your current job.
   Probe: What leads to that satisfaction level?

Appendix D

Leader Interview Guide

1. Consider a typical work week. How do you convey new information to your remote employee?
   Probes: if not mentioned ask about email, paper, phone, other

2. Describe a time when you provided your remote employee with direction that was misunderstood.
   Probes: if necessary, remind leader that this could be big, small, simple, complicated, one-time or repetitive tasks

3. On a scale of 1 to 10, with one being “incredibly ineffective” and 10 being “incredibly effective”, describe how effective your remote employee is in his/her role in the organization.

4. If you could change one thing about your interaction with your remote employee, what would you change?