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EXPLORING THE EXPERIENCES

OF TECHNICAL COACHES USING RULES-OF-THUMB

A Dissertation in

Workforce Education and Development

by

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ABSTRACT

Research literature defined rules-of-thumb as informal guidelines, shortcuts to contextual knowledge, epitomes of tacit knowledge, and codes used by both experts and novices in exchanging knowledge. Building upon those thoughts the objective of this case study was exploring and understanding the experience of using rules-of-thumb when sharing personal knowledge in the workplace.

The researcher observed, interviewed, and analyzed the data collected from 12 technical coaches (TCs) working in the same company. The company provided customer service operations. The TCs were subject matter experts required to share what they know, what works, with their team everyday. Data analysis followed the thematic approach suggested by van Manen.

The results of this study were a collection of 300 transcontextual and contextual rules-of-thumb sharing the experience of what it is like for a TC to use rules-of-thumb when sharing knowledge. Transcontextual refers to applying across a variety of contexts. Contextual refers to applying to the context of the TC's experience. The collection of 300 rules-of-thumb came from the direct experiences, the context, of the participants yet could apply across a variety of contexts. This explorative study also exposed: hard and soft rules-of-thumb; the tacit and explicit nature of rules-of-thumb; the operationalization of tacit knowledge via collecting rules-of-thumb; and how rules-of-thumb flowed through the SECI model of Nonaka and Takeuchi.

Additional insights included: transcontextual rules-of-thumb connect people and points to what works across different contexts; and, contextual rules-of-thumb connect people within a context to what works in that particular context. Reflecting upon the

findings, the researcher presented additions to the literature, potential implications, and future research possibilities regarding rules-of-thumb. The researcher concluded the experience of using rules-of-thumb when sharing knowledge was an experience of sharing of one's self, connecting people, and pointing to what works.

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CHAPTER 1

Introduction

This study was a journey of exploring and understanding the experience of using rules-of-thumb when sharing personal knowledge. This journey came with two challenges. First, the challenge for both myself as the researcher and for the study's participants was what Polanyi (1966) said, "we know more than we can tell" (p. 4). That quote sets the tone for the spirit of this research project. Could the participants of this study tell what their experiences were like when using rules-of-thumb to share their knowledge? Second, could the reader of this report connect with the experience of using rules-of-thumb to share what the researcher has come to know? Please consider the author of this study as "the researcher" from this point and moving forward.

Researcher's Perspective

To address the two challenges mentioned above and to share his insights, the researcher intended to use rules-of-thumb in a way that allowed the reader to understand the experience behind the words expressed in this report.

Researcher's Rule-of-Thumb (RRT)-1   Share how you think. Create a shared experience. Allow others to dwell in your thinking and experiences.

How does this researcher think? He thinks broadly then deeply. He thinks chronologically. He thinks about the whole then the parts. He thinks in patterns. He thinks in fragments. He thinks in story. He thinks with examples first and then with the reasoning behind the examples. These ways of thinking are natural for him, unique to him, and have brought him to this point. What is the importance of knowing this?

Perhaps now one can understand more of how and why the researcher did as he did within this study.

The design and content of this report communicated as much as possible what the researcher had come to know and feel regarding the experiences of the participants and his experiences encountered while conducting this study. The researcher did not realize the overwhelming guiding presence of rules-of-thumb until he was creating this report. Having a conscious awareness of using rules-of-thumb to share what he had come to know, the researcher allowed this awareness to guide the creation of this report as it did the study. Now the journey unfolds before you.

Throughout this report the researcher embedded rules-of-thumb as guides offering direction, understanding, and perspective. Doing so enabled the reader to begin to experience using rules-of-thumb during knowledge sharing. The rules-of-thumb offered two points of view, that of the researcher and that of the study's participants. RRT indicated the rule-of-thumb came from the researcher's experiences and TCRT indicated the rule-of-thumb came from the participants' experiences. RRT-1 leads the way into this study. RRT-2 follows.

RRT-2   When presenting information to audiences follow these 5 steps: briefly introduce the topic; tell about the author; tell how the material is organized; present the material; and finally summarize the material and conclude.

Collectively these five steps express the researcher's general guideline for successfully presenting material to an audience in a meaningful and thoughtful fashion. The five statements were rules-of-thumb a mentor gave this researcher years ago. Those five statements worked well for the mentor in conveying what he knew to others. He

suggested the researcher take some time to try them out; personally adopt them; and use them to find the same success he found. The researcher did and they have served him well over the years. Now the researcher intended to use them as the doorway into his study.

RRT-2 / Step One   Briefly introduce the topic.

This study was a journey of exploring and understanding the experiences of an individual using rules-of-thumb when sharing personal knowledge. The individual was a subject matter expert charged with sharing what he or she knows with others. The personal knowledge was tacit and explicit and specifically considered a rule-of-thumb. The setting was within the workplace. The study was both fascinating and challenging. It was fascinating because the study reveals many success-oriented informal rules collected from the participants, the literature, and the researcher. It was challenging because rules-of-thumb were epitomes of tacit knowledge which in itself is quite abstract (Haldin-Herrgard, 2004).

RRT-2 / Step Two   Tell the audience who you are and about yourself.

The primary researcher and author of this study is Stan Poduch. He is a doctoral student, a self-employed knowledge coach, a published author, and overall curious person. Since the mid 1990's he has made his living collecting and sharing procedures, facts, and ideas of 'what works' with those who would benefit by knowing this information within the workplace, the marketplace, and the classroom. He talks to people about 'what works,' watches people to see 'what works,' and reads what they write about

achieving their successes. Then he shares these findings with others. Stan Poduch, the researcher, is a collector and sharer of rules-of-thumb. The power of rules-of-thumb captivates him and draws him to want to know what is behind this phenomenon, particularly as it relates to sharing personal knowledge. He decided to formally study rules-of-thumb as well as continue collecting and sharing them professionally.

RRT-2 / Step Three   Tell the audience how the material is organized.

Five chapters divide this report. Chapter One presents the Introduction, Researchers Perspective, Definition of Key Terms, Historical Perspective, The Problem, Significance of this Study, Research Question, Limitations, Assumptions, Theoretical Framework, and Summary and Conclusion.

Chapter Two is a Review of Relevant Literature. The topics within the review include Rules-of-Thumb, Tacit or Explicit Knowledge, Knowledge Transfer, Knowledge Sharing, and Knowledge Creation. Chapter Two ends with a Summary and Conclusion.

Chapter Three is the study's Methodology discussing the 30 topics involved in conducting this study. Chapter Three ends with a Summary and Conclusion.

Chapter Four is the Findings presenting the Study Results Overview; Presentation of the Results; the Findings; and Researcher's Reflections and Summary of the Study's Data. Chapter Four ends with a Summary and Conclusion.

Chapter Five is the Summary, Implications, and Researcher's Reflections. Chapter five ends with a Summary and Conclusion.

RRT-2 / Steps Four and Five   Present the material, summarize, and conclude.

The presentation of material begins with the next section, Definition of Key Terms.

Definition of Key Terms

RRT-3   Develop a shared language for a better understanding of information presented and discussed.

The following presentation of key terms with definitions creates a shared language and common understanding. The researcher accepted each key term as defined at the onset of this study. The terms sensitized him to world of rules-of-thumb and sharing knowledge. The following key terms, in alphabetic order, initiate this study.

Ba. "*Ba* is essentially a shared space that serves as a foundation for knowledge creation, one that is often defined by a network of interactions….an enabling context…" (von Krogh, Ichijo, & Nonaka., 2000, p. 178). In addition to the Ba discussed in this study, consider this report an enabling context to dwell within for the purpose of understanding what it is like to experience using rules-of-thumb when sharing knowledge.

Data. "Data is a set of discrete, objective facts about events" (Davenport & Prusak, 2000, p. 2). "We know that data is plural noun, but we've chosen to use the more popular singular usage" (p. 180).

Explicit knowledge. "Explicit knowledge…can be put in a form that can be communicated to others through language, visuals, models, or other representations" (Dawson, 2000, p. 12).

Information. "Think of information as data that makes a difference….It is a message, usually in the form of a document or an audible or visible communication"

(Davenport & Prusak, 2000, p. 3). "The essential distinction between information and knowledge is that information can be digitized, while knowledge is intrinsic to people" (Dawson, 2000, p. 59).

Knowledge. "Knowledge is a fluid mix of framed experience, values, contextual information, and expert insight that provides a framework for evaluating and incorporating new experiences and information. It originates and is applied in the mind of the knower. In organizations, it often becomes embedded not only in documents or repositories but in organizational routines, processes, practices, and norms" (Davenport & Prusak, 2000, p. 5). "In our theory of organizational knowledge creation, knowledge is defined as justified true belief" (Nonaka & Takeuchi, 1995, p. 86).

Knowledge Creation. According to Nonaka and Takeuchi (1995) knowledge creation is the conversion of tacit knowledge to explicit knowledge through the dynamic process of Socialization, Externalization, Combination, and Internalization – The SECI model.

Knowledge Management. "Knowledge Management is therefore a conscious strategy of getting the right knowledge to the right people at the right time and helping people share and put information into action in ways that strive to improve organizational performance" (O'Dell & Grayson, 1998, p. 6).

Knowledge sharing. According to Nonaka & Takeuchi (1995) knowledge sharing is the interplay between individuals allowing each to dwell in the thinking and processes of another's experiences, consciously or unconsciously.

Knowledge Spiral. Developed by Nonaka & Takeuchi (1995) as the model of the Theory of Organizational Knowledge Creation where the interaction of tacit and explicit

knowledge take place within an enabling context known as Ba. Also known as the SECI model.

Knowledge transfer. "Knowledge transfer involves two actions: transmission (sending or presenting knowledge to a potential recipient) and absorption by that person or group" (Davenport & Prusak, 2000, p. 101).

Knowledge Worker. "He or she needs to be a thinker, a team player, a team leader, a critic, an autonomous decision maker – adaptable, responsible, and so on….In our opinion, the key quality of being a knowledge worker is their humanness. Only through being human can they become knowledge workers" (von Krogh, Ichijo, & Nonaka, 2000, p. 12).

Redundancy. "What we mean here by redundancy is the existence of information that goes beyond the immediate operational requirements of organizational members….redundancy refers to the intentional overlapping of information" (Nonaka and Takeuchi, 1995, p. 80).

Rules-of-thumb. Rules-of-thumb summarize patterns into simple, memorable, and reliable informal rules. They are decontextual statements that are shortcuts to more contextual knowledge. Rules-of-thumb transfer knowledge quickly and efficiently. Experts use rules-of-thumb in quick decision-making. Novices use rules-of-thumb as a guideline to action. Coaches use rules-of-thumb for efficient knowledge transfer (Leonard & Swap, 2005). Also, rules-of-thumb are "The rule you carry with yourself" (Andre, Borgquist, Foldevi, & Molstad, 2002, p. 618).

Shared Experience. As defined by TCRT-85 (p. 137) and TCRT-258 (p. 175): "…what I can bring to a situation…I think is going to be a little bit different than what

anyone else can bring to the situation. But I think that there's a universal shared wisdom common type of thing."

Tacit knowledge. "Tacit knowledge refers to action-oriented knowledge, which is typically acquired without direct help from others and allows individuals to achieve goals they personally value" (Sternberg, 1997, p. 236). Also, "We know more than we can tell" (Polanyi, 1966, p. 4) illustrates tacit knowledge.

Technical Coach. A Technical Coach (TC) is a subject matter expert with the responsibility of a team leader and the duties of supporting the team members in doing their jobs successfully. This is a job title found in the customer service and technical service industries. In this study the TC supports team members in the receiving and processing customer service requests. This study explores the TC's experiences of using a rule-of-thumb to share what he or she knows in the course of doing their work.

Transcontextual. To apply "across a variety of contexts and disciplines … across settings and domains of knowledge" (Sternberg, Roediger, Halpern, 2007, p. 9). "Transfer across domains" (Halpern, 1998, p. 449).

Historical Perspective

RRT-4   Examine and reflect upon what has gone before; then you have a foundation
            to build upon.

As stated before, this study was about rules-of-thumb, a unique component of workplace knowledge. Individuals created and passed on complex workplace knowledge using this notion for centuries with early users being medieval castle builders and craftsmen (Håkanson, 2007). Ironically, most of us appear to take the notion of rules-of-thumb for granted in the sharing of our know-how particularly in the workplace (Jadad &

Enkin, 2000). This component of workplace knowledge is slowly starting to resurface in workplace knowledge research. The number of studies regarding rules-of-thumb is small, almost non-existent. The empirical studies found span a wide range of contexts and the timeline of empirical interest is relatively short compared with other topics.

Consider the following empirical works listed in chronological order as a historical journey of intellectual thought regarding interest and progress in understanding rules-of-thumb within the workplace. Wagner, Sujan, Sujan, Rashotte, and Sternberg (1999) collected sales personnel rules-of-thumb to test a tacit knowledge index of sales personnel. Davenport and Prusak (2000) included rules-of-thumb as an integral part of individual working knowledge. Andre, et al. (2002) and Andre, Borgquist, and Molstad (2003) determined that rules-of-thumb represent the tacit knowledge physicians use in their practice. Tiwana (2002) considered rules-of-thumb a valuable part of the knowledge management concept residing within the individual. Hesketh et al. (2002) investigated the use and role of rules-of-thumb in firefighting and firefighting training. Haldin-Herrgard (2003) considered rules-of-thumb an epitome of tacit knowledge. Bailey and Gainsburg (2003) established that engineers use rules-of-thumb as part of their practice. Ryan and Kolodner (2004) examined how rules-of-thumb impact learning science in a school classroom. Leonard and Swap (2005) suggested that rules-of-thumb are a critical part of "Deep Smarts" also called enduring business wisdom. Tucker and Edmondson (2003) found rules-of-thumb related to nurses' decision making processes. Gigerenzer (2007) considered rules-of-thumb the creator of gut feelings. And Farrar and Trorey (2008) found rules-of-thumb to be exhibits of tacit knowledge and intuition in masonry craftsmen. The timeline of these empirical works spanned less than fifteen

years suggesting a nascent interest in the notion of rules-of-thumb as they relate to workplace knowledge. Also, these studies did not exclusively and primarily focus upon rules-of-thumb. The interest in rules-of-thumb was secondary to other concerns such as tacit knowledge, decision-making, learning transfer, business wisdom, and even gut feelings. Perhaps future research will focus directly and primarily upon rules-of-thumb since it has significant impact within the studies mentioned. Presently empirical investigations regarding rules-of-thumb as a primary interest or secondary interest in the workplace are scarce.

Also, the literature reviewed did not mention, question, or address rules-of-thumb as having both tacit and explicit qualities. Polanyi (1966) was widely cited as he suggests the tacit and explicit distinctions of personal knowledge. Nonaka and Takeuchi (1995) were also widely cited as they examine the interplay of tacit and explicit knowledge with their Theory of Organizational Knowledge Creation. Yet, no study mentions the notion that a rule-of-thumb seemingly has a foot in both the tacit dimension and the explicit dimension of personal knowledge. Researchers and practitioners either ignore, take for granted, or do not consider the tacit and explicit qualities of a rule-of-thumb.

For example, Wagner et al. (1999); Davenport and Prusak (2000); Andre et al. (2002); Andre et al. (2003); Haldin-Herrgard (2003); Leonard and Swap (2005); and Farrar and Trorey (2008) all suggested a tacitness towards rules-of-thumb but never an explicitness. The only researchers who clearly suggested an explicit side of rules-of-thumb are Ryan and Kolodner (2004) when they created a template that codifies a rule-of-thumb for use and discussion purposes. The interplay between the tacitness of a rule-of-thumb and the explicitness of that same rule deserves more examination. Again, it

appears that this 'thing' described as an informal guideline created from experience was so common place it was taken for granted and literally forgotten by many in the workplace knowledge research community. However, the literature considered tacit knowledge a valuable resource. A rule-of-thumb was an epitome of tacit knowledge suggesting it also had value and therefore deserved exploration.

The Problem

RRT-5   Know the reason behind the research journey.

Broadly stated the research problem was, "we know more than we can tell" (Polanyi, 1966, p. 4) and what that statement implied regarding workplace knowledge. As abstract as this problem was one can narrow one's focus by considering the following.

Knowledge stored in the heads of people, built from trial and error of experiences over time with both tacit and explicit dimensions, was valuable and essential to any organization however the tacit component was difficult to capture and share (Nonaka & Takeuchi, 1995; Davenport & Prusak, 2000; Leonard & Swap, 2005).

Ambrosini and Bowman (2001); Brockmann and Anthony (2002); and Johnson (2007) all suggested that tacit knowledge was difficult to operationalize and therefore empirical studies were limited and few in number only making the practical understanding and use of tacit knowledge more confusing and difficult. However, Ambrosini and Bowman suggested using semi-structured interviews and observation and Janson and McQueen (2007) suggested using conversations to attempt to operationalize tacit knowledge for study. The possibility for studying tacit knowledge and its

embodiments appeared to exist. Yet confidence in pursing empirical works seemed lacking in the literature, and disorder and confusion existed.

For example, Haldin-Herrgard (2001) collected 23 definitions of tacit knowledge. Håkanson (2007) suggested the literature on tacit knowledge is ambiguous, confusing, and lacks agreement in the way the term tacit knowledge is used. One could sense the frustration and confusion regarding tacit knowledge. However as stated earlier tacit knowledge was a valuable resource and regarded as a source of competitive advantage (O'Dell & Grayson, 1998) especially when shared thus motivating empirical investigation. But investigate what, specifically?

Tiwana (2002) suggested that, "it is the subconscious repertoire of scripts and rules-of-thumb that make experienced managers more valuable than new hires" (p. 47). He went on to say, "Tacit knowledge, however complex to understand and manage, holds the promise for long-lasting impact if we can successfully tap into even a fraction of what is available" (p.47). Having said that, he suggested we needed to investigate tacit knowledge. Now consider this, rules-of-thumb were epitomes of tacit knowledge (Haldin-Herrgard, 2003). Perhaps a study focusing upon rules-of-thumb in use, knowing they were an epitome of tacit knowledge was manageable. Still such a study may represent difficulty in fully articulating the insights and direct experiences that shaped the rule. There lies the challenge for a study as well as the potential for unknown rewards resulting from a deeper understanding of the phenomenon of rules-of-thumb in use.

All that said, it would seem that an exploration of the phenomenon of rules-of-thumb in use, a known component of tacit knowledge, was a worthy pursuit. Any insights found would certainly expand the limited understanding of both rules-of-thumb

and tacit knowledge. And perhaps any insights found would clear away some of the frustrations and confusion surrounding these potentially valuable components of workplace knowledge.

Therefore, considering the above thoughts this study focused upon one aspect of tacit knowledge, rules-of-thumb. Then the study narrowed the focus by exploring the individual's experiences of using rules-of-thumb when sharing personal knowledge. The individuals desired as participants were subject matter experts with deeply embodied personal knowledge formed by past experiences related to the workplace. The workplace roles required the participants to share their know-how with others, this being similar to Leonard and Swap's (2005) explanation of a knowledge coach. By collecting and exploring the experiences of these individuals as they used rules-of-thumb, this study may be able to shed more light upon the thought of Polanyi's (1966) notion, "we know more than we can tell" (p. 4) as it related to workplace knowledge.

Significance of Study

RRT-6   Know the value of the research journey.

"Tacit knowledge, however complex to understand and mange, holds the promise for long-lasting impact if we can successfully tap into even a fraction of what is available" (Tiwana, 2002, p. 47) was a quote worth repeating. The significance of this study was the ability to tap into an embodiment of tacit knowledge known as a rule-of-thumb and then come to an understanding of what it was like to experience that epitome of tacit knowledge. To the awareness of this researcher, no such study existed.

The insights gained from this study may expand our awareness of what it was like to use a rule-of-thumb when sharing knowledge. Or the insights may illuminate the difficulties experienced. The insights gained from this study may offer an expanded perspective of what it was like to be a subject matter expert, in this case a technical coach (TC), required to share what he or she knows. And finally the insights gained from this study may renew and expand the interest into understanding the phenomenon of rules-of-thumb. Sharing such insights is a significant contribution to the domain of workplace knowledge.

Research Question

RRT-7   The research question is the pathway into addressing the research problem.

This study explored the experience of using rules-of-thumb of a TC when sharing personal knowledge. The objective was to collect, explore, describe, and interpret the experiences from the perspective of the TC. This was a qualitative study seeking a deeper understanding of the phenomenon of using a rules-of-thumb when sharing personal knowledge.

The primary research question was: What is the experience of using rules-of-thumb like for a Technical Coach when sharing personal knowledge?

Limitations

RRT-8   Know the limits and boundaries of your inquiry.

The findings of this study were limited to the participants involved within the study. However, the understandings garnered and descriptions presented are transferable to future studies, practitioners of workplace knowledge, and other interested individuals.

The findings of this study were the interpretations of this researcher as he dwelled in the experiences of the participants. Another researcher may see the participants' world differently. This researcher believed there are infinite possibilities of interpretation available; this being the best interpretation of the participants' experiences the researcher's 'gut' told him to offer.

This study focused upon only one aspect of workplace knowledge—rules-of-thumb. This study was sensitive to the other aspects of workplace knowledge such as tacit or explicit knowledge, knowledge sharing, knowledge transfer, and knowledge creation but did not investigate these aspects beyond seeking a general understanding of each.

Also, this study did not investigate the phenomenon of workplace coaching beyond the fact that the participants were technical coaches who potentially used rules-of-thumb when sharing personal knowledge. The participants were selected due to the nature of their job, sharing what they knew regarding the work at hand with their team on a daily basis. Insights from this study may apply to workplace coaching but to understand workplace coaching was not the focus. The focus was to understand the experience of using rules-of-thumb when sharing personal knowledge.

Assumptions

RRT-9   State what is on your mind, explicitly. Acknowledge your thoughts and
           notions about the research ahead so others may better understand your
           thinking processes.

The researcher acknowledged the following assumptions upon entering this study. "In a strict sense, knowledge is created only by individuals," (Nonaka & Takeuchi, 1995, p. 59). The process of sharing the expertise by one person to another is common and in use everyday within organizations (Leonard & Swap, 2005; Davenport & Prusak, 2000; Hinds, Patterson, & Pfeffer, 2001). "Knowledge works through rules-of-thumb: flexible guides to action that developed through trial and error and over long experience and observation" (Davenport & Prusak, 2000, p. 10).

And as Nonaka and Takeuchi (1995) suggested, knowledge flows from the experiences of the person. They believed the person was a body/mind, a whole being. Otherwise they offered that we would live in a dual world of either body or mind. But as a whole person, with body/mind as one, we think, we act, we feel, and we build experiences and these experiences were common everyday occurrences in the workplace and elsewhere. It was these direct experiences of life this study sought to capture and share. In this case, the direct experiences of life were the experiences of using rules-of-thumb when sharing personal knowledge.

Theoretical Framework

RRT-10   Know the structure that both binds this study together and provides a lens through which to see and explore the research journey from beginning to end.

The framework sensitizing this study was the SECI Model found within the Theory of Organizational Knowledge Creation by Nonaka and Takeuchi (1995). The model consists of Socialization (peer-to-peer tacit knowledge conversion),

Externalization (tacit knowledge-to-explicit knowledge conversion), Combination

(explicit knowledge-to-explicit knowledge conversion and dissemination), and

Internalization (explicit knowledge-to-tacit knowledge conversion).

Three distinct reasons lead to the selection of this particular framework. First,

this model was a representation of the conversion of tacit knowledge into explicit

knowledge and then back again into tacit knowledge at the individual level, group level

and organization level. The individual level was the focus of this study. Perhaps this

model could illuminate the experience the study's participants had when using rules-of-

thumb when sharing knowledge, since rules-of-thumb were an epitome of tacit

knowledge and tacit knowledge propels this model.

Second, each mode of conversion: Socialization, Externalization, Combination,

and Internalization were distinct and may be possible to notice during the study's

observation and interview process. For example, the model suggested during

Socialization the environment must provide time, space, and expectations for individuals

to come together to share experiences. Tacit knowledge was shared in Socialization.

During Externalization, the conversion process moved tacit knowledge into explicit

knowledge through capturing metaphors, analogies, stories, sketches, diagrams and the

like. Explicit knowledge codification occurred in Externalization. During Combination,

the conversion process took into account gathering, transferring, and editing explicit

knowledge. Explicit knowledge distribution occurred in Combination. And finally

during the Internalization phase, there was reflection and learning by doing and new

knowledge created. New tacit knowledge creation and embodiment occurred in

Internalization. The individual learned and acquired new tacit knowledge by practice

hence; the individual embodied new knowledge through reflective action and practice. Thus this model pointed to what to look for during observation. The study noted patterns of: person-to-person sharing of experiences; exchange of metaphors, analogies, stories, sketches, etc.; documents, digitized information, books, etc., and finally the observation of learning by doing.

Third, applying this model to follow the experience of using an embodiment of tacit knowledge – rules-of-thumb – had not occurred as of yet according to this study's literature review. That fact along with the observable characteristics of each knowledge conversion process (Socialization, Externalization, Combination, and Internalization) supported the use of this theoretical framework. Figure 1 illustrates the SECI model.

	Tacit Knowledge	To	Explicit Knowledge

	Tacit Knowledge To Explicit Knowledge	
Tacit Knowledge From	SOCIALIZATION	EXTERNALIZATION
Explicit Knowledge	INTERNALIZATION	COMBINATION
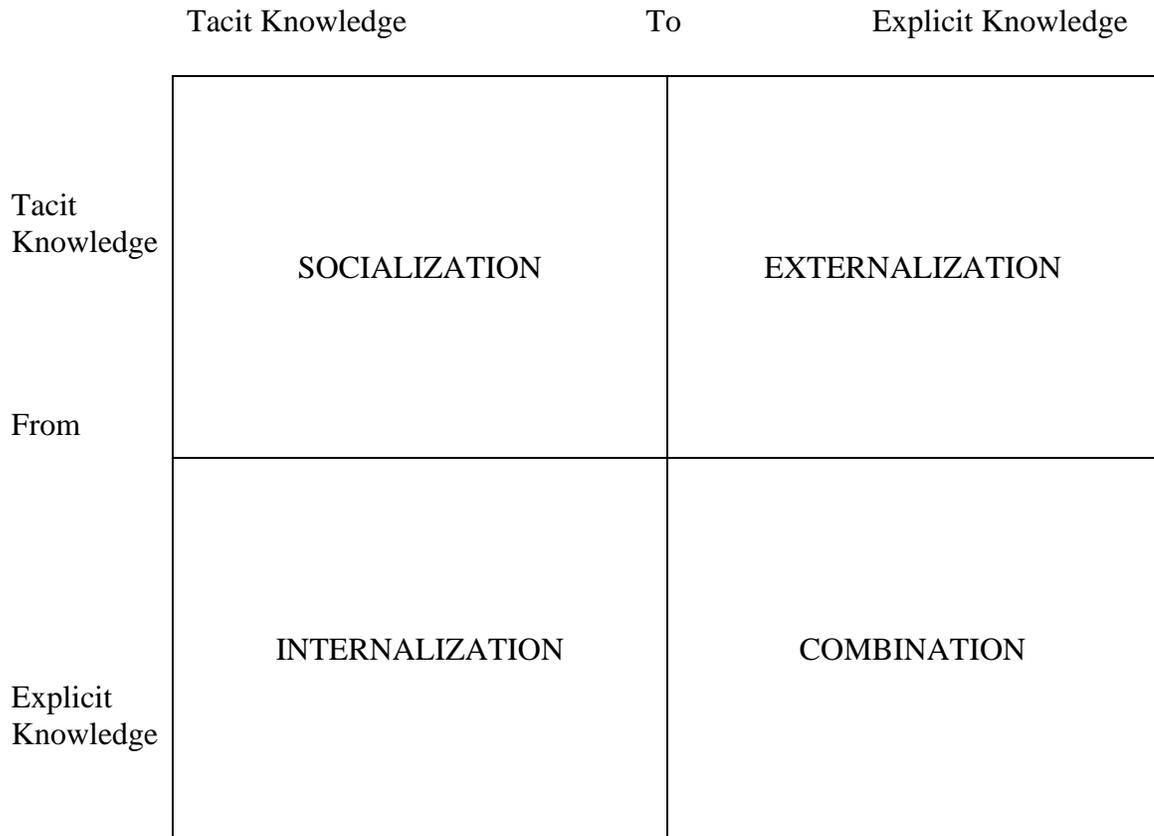
Figure 1. Four modes of knowledge conversion. (Nonaka & Takeuchi, 1995, p. 62).
With Permission Oxford University Press.

Summary and Conclusion

Chapter One began with an introduction of this study and the researcher's
reflection regarding his relationship with rules-of-thumb. Then the chapter presented the
layout of this report with regard to the use of rules-of-thumb embedded within the text.
Following that, this chapter provided a historical perspective of empirical works that
preceded and shaped this study. Most importantly, this chapter included the research

problem, the research question, assumptions, and limitations. Finally, this chapter

presented the theoretical framework that gives structure to this study.

        Chapter Two, the review of relevant literature is next.

CHAPTER 2

Review of Relevant Literature

Chapter Two presents a review of relevant literature regarding five topics related

to this study. The topics are: rules-of-thumb, tacit or explicit knowledge, knowledge

transfer, knowledge sharing, and knowledge creation. Recall the researcher desired to

understand what it was like to use rules-of-thumb when sharing personal knowledge in

the workplace. The researcher found no studies directly related to rules-of-thumb and

knowledge sharing. Most of the literature collected was theoretical and not empirical.

Perhaps the abstract nature of the topic as suggested by Haldin-Herrgard (2004), or the

difficulty to operationalize tacit knowledge as suggested by Ambrosini and Bowman

(2001), or the thought that the literature is ambiguous and confusing and lacking in

agreement on what tacit knowledge and its personification means as suggested by

Håkanson (2007) created this dearth of directly-related literature.

As in Chapter One researcher rules-of-thumb appear. Five RRTs guiding the

collection, the analysis, and the presentation of the literature within this review follow.

RRT-11   Use a common language and common terms to help in the communication
           of information. Davenport and Prusak (2000) suggested this thought.

The common terms – key words – used to collect literature were rules-of-thumb,

tacit or explicit knowledge, knowledge transfer, knowledge sharing, and knowledge

creation. These were common terms within the domain of workplace knowledge,

knowledge management, and organizational learning. Searching with these terms

revealed the literature presented as relevant to this study.

RRT-12   A researcher knows when an article is valuable or statement is valuable.

"People are able to determine whether a given document is interesting just by glancing through it. However, when asked to make explicit the rules upon which such a decision is based, they are unable to do so" (Stenmark, 2000, p. 1).

RRT-13   Be aware of metaphors and the meaning behind them. Metaphors help one understand and convert tacit knowing to explicit knowing. Nonaka and Takeuchi (1995) suggested this thought.

Consider this metaphor. When putting together a large puzzle with many small pieces, a rule-of-thumb could be, spread out all of the pieces on the table and start to match up the patterns. That was what the researcher did to create this review. He spread out all of the pieces he found interesting and relevant, then listed them – the parts – to get a glimpse of the whole.

RRT-14   Collect shortcuts, statements of facts to know or actions to take, and use these statements as a form of shorthand to quickly embody a deeper or broader personal knowledge across subjects.

These shortcuts or 'shorthand' statements created paths to contextual knowledge. Experts used these statements to share what they knew and novices used the same as guidelines leading to more contextual information. These shortcuts or shorthand statements "summarize a great amount of patterns into one simple, memorable – and usually reliable – rule" (Leonard & Swap, 2005, p. 195).

Each study within this literature review contains a listing of simple 'shorthand' statements – possibly potential rules – paraphrased by the researcher of the present study. Following that listing another section containing a brief narrative with relevant context

supports the previous statements. A question one may ask at this time is, "why do this?"

The answer, the researcher wanted redundancy.

RRT-15   Overlap ideas and information to enhance understanding and learning.
          Repeat the message in different ways. Offer the message in as many ways
          as time and space permit and the repetition may increase understanding and
          awareness of a topic.

According to Nonaka and Takeuchi (1995), redundancy created new knowledge

by creating a borderless environment where new perspectives were welcomed and

encouraged. New perspectives brought new aspects of comparative importance and

potentially new knowledge. The researcher used the concept of redundancy to present

the review of examined literature. The researcher believed this method was an excellent

way to share and transfer knowledge quickly and efficiently.

How to Read the Review of Relevant Literature

The researcher presented each topic and each study reviewed in two ways. Each

topic began with a presentation of shorthand lists. The shorthand lists contained only

paraphrased statements meant to quickly sensitize the reader to the topic and to the study.

A full summary of each study listed appears afterward in the section entitled Contextual

Narratives related to that topic. The review begins below.

Rules-of-Thumb

Rules-of-Thumb Shorthand Lists

Below are 13 studies the researcher examined regarding rules-of-thumb. Each

study contains only shorthand statements paraphrasing the important insights regarding

rules-of-thumb. After the shorthand lists of the 13 studies a full summary of each study

follows in the section entitled Rules-of-Thumb Contextual Narratives.

Wagner et al. (1999) relevant insights:

- Rules-of-Thumb are a component of tacit knowledge.
- Rules-of-Thumb are used in the measurement of tacit knowledge.
- Rules-of-Thumb are suggested for use in training individuals valuable tacit knowledge skills.
- Rules-of-Thumb are not intended to be strictly accurate.
- Rules-of-Thumb are a useful principle with wide application.

Davenport and Prusak (2000) relevant insights:

- Rules-of-Thumb are shortcuts to solutions to new problems that resemble previously solved problems.
- Rules-of-Thumb are flexible guides to action.
- Rules-of-Thumb develop through trial and error.
- Rules-of-Thumb develop over long experience and observation.
- Rules-of-Thumb use pattern recognition to speed decisions and problem solving.

Tiwana (2002) relevant insights:

- Rules-of-Thumb are shortcut solutions to problems that have been seen before.
- Rules-of-Thumb come from experience.
- Rules-of-Thumb provide a single option out of a limited set of specific appropriate choices.
- Rules-of-Thumb build upon experience and therefore make experienced workers more valuable than novices.
- Rules-of-Thumb help us avoid useless tracks or approaches to problem solving.

Hesketh et al. (2002) relevant insights:

- Rules-of-Thumb work across similar situations.
- Rules-of-Thumb are simplified in time pressure situations.
- Rules-of-Thumb work well in conjunction with good examples.

Andre, et al. (2002) relevant insights:

- Rules-of-Thumb are mental patterns that could be made conscious.
- Rules-of-Thumb are action oriented.
- Rules-of-Thumb are used by practitioners during consultation.
- Rules-of-Thumb are used even when not fully understood.
- Rules-of-Thumb are able to be recognized by practitioners.
- Rules-of-Thumb are able to be created by practitioners and produce specific examples.

- Rules-of-Thumb are transferred among colleagues by word-of-mouth.
- Rules-of-Thumb are used to simplify and expedite work.
- Rules-of-Thumb are used as a key component of sharing and transferring workplace knowledge.

Andre et al. (2003) relevant insights:

- Rules-of-Thumb are used for rapid assessment.
- Rules-of-Thumb generalize and individualize processes.
- Rules-of-Thumb contain probability and risk assessment features.
- Rules-of-Thumb balance between a general practitioner's individual and general perspective.

Burns and Schaefer (2003) relevant insights:

- Rules-of-Thumb become a synonym for advice.
- Rules-of-Thumb represent lessons learned.
- Rules-of-Thumb typify advice found in survival memos.
- Rules-of-Thumb are informal learnings and expertise.

Bailey and Gainsburg (2003) relevant insights:

- Rules-of-Thumb historically established knowledge.
- Rules-of-Thumb are passed down from senior engineers to junior engineers.
- Rules-of-Thumb are taught in school.
- Rules-of-Thumb represent codified and non-codified knowledge.
- Rules-of-Thumb create design and analysis estimates.
- Rules-of-Thumb are generated by engineers in the course of practice.
- Rules-of-Thumb exist as a shortcut to get a head start on work.

Tucker and Edmondson (2003) relevant insights:

- Rules-of-Thumb are used in first-order problem solving.
- Rules-of-Thumb are tacitly relied upon in time pressure situations.
- Rules-of-Thumb create consistency of responses.

Ryan and Kolodner (2004) relevant insights:

- Rules-of-Thumb become a practice when ritualized and repeated.
- Rules-of-Thumb can be templated into a 'when/use/build/employ/because' format.
- Rules-of-Thumb are both contextual and decontextual in form.

Leonard and Swap (2005) relevant insights:

- Rules-of-Thumb are a critical component of enduring business wisdom.
- Rules-of-Thumb summarize patterns into simple, memorable, and reliable rules.
- Rules-of-Thumb are shortcuts to more contextual knowledge.
- Rules-of-Thumb transfer knowledge quickly and efficiently.
- Rules-of-Thumb are used by experts as shorthand statements of experience.
- Rules-of-Thumb are used by novices as a guideline.
- Rules-of-Thumb are used by coaches for efficient knowledge transfer.

Gigerenzer (2007) relevant insight:

- Rules-of-Thumb build upon each other as building blocks would.

Farrar and Trorey (2008) relevant insights:

- Rules-of-Thumb communicate, transmit, and build knowledge.
- Rules-of-Thumb freely express condensed knowledge.
- Rules-of-Thumb become codes used by experts.
- Rules-of-Thumb are also known as maxims.
- Rules-of-Thumb are vehicles for learning used by novices.
- Rules-of-Thumb exhibit tacit knowledge and intuition.
- Rules-of-Thumb contain emotion.

Rules-of-Thumb Contextual Narratives

The narratives below summarize 13 studies reviewed regarding rules-of-thumb. However the researcher suggests the studies regard rules-of-thumb of secondary importance. In some studies, tacit knowledge is of primary importance. In other studies knowledge transfer, knowledge sharing, or learning takes the primary role of the inquiry. A summary appears at the end of this section. The review begins below.

In a study of tacit knowledge in sales, Wagner et al. (1999) examined the expert-novice differences in sales related tacit knowledge. The objective of the study was to determine if a sales person's rules-of-thumb could illuminate the differences in expert-novice knowledge. The researchers used the following methodology. The researchers constructed a Tacit Knowledge Inventory TKI from a literature review, interviews, and

collecting personal experiences. The TKI contained 36 rules-of-thumb for salespeople. "An example of a rule of thumb for setting sales goals is, 'set goals that are measurable and specific'" (p. 159). Eighty participants with varying sales experience took the TKI. The participants received eight sales scenarios with 8-12 response options constructed from the 36 rules-of-thumb for salespeople and instructions to select the best response. Using a statistical scoring system the researchers analyzed the results. Conclusions related to the present study were: tacit knowledge scores increased with experience. Tacit knowledge existed and could measure the successful practical intelligence and performance of individuals in a specific domain. Rules-of-thumb characterized what experts know. The rules-of-thumb collected applied to a variety of sales situations. And rules-of-thumb were, "a useful principle with wide application not intended to be strictly accurate" (p. 159).

In a second study of tacit knowledge, Wagner et al. (1999) examined tacit knowledge and rules-of-thumb related to salespeople. The objective was to understand if tacit knowledge of salespeople is both procedural and declarative. The researchers assessed a series of cross-sectional and longitudinal studies conducted by Sujan, Sujan, and Bettman (1988, 1991). The researchers used the following methodology. The subjects were part-time students working as telemarketing salespeople/university fundraisers. Forty-one salespeople participated. An open-ended methodology of free elicitation and rating methods required the salespeople to write down their descriptions in short descriptive labels of the different alumni encountered and the strategies used to interact with the different alumni. Each student then received a questionnaire created from the 10 most frequent characteristics and 10 most frequent strategies. The

salespeople rated each declarative and procedural descriptor for its appropriateness. A sales manager assessed each student's sales effectiveness. The study was cross-sectional and longitudinal and replicated 13 weeks later with 12 salespeople. The results suggested that over time 11 of the 12 salespeople became more effective. The conclusions related to the present study were: more effective salespeople developed rules-of-thumb regarding 'knowing that' supporting 'knowing how.' Also offered was the suggestion to develop training programs where star performers in sales become actively involved in creating and sharing their rules-of-thumb in sales with less experienced salespeople. The participants of the training programs would collect, share, and learn declarative and procedural knowledge between experienced and less-experienced individuals.

Next, Davenport and Prusak (2000) examined workplace knowledge within organizations. The objective of the study was to understand how knowledge functions within the workplace. The researchers used the following methodology. Twenty-five companies participated in interviews and discussions with the researchers. The researchers interviewed corporate managers regarding how knowledge functions within their workplace. The corporate managers did not know how to answer this question but to say they wanted *'insights'* such as how to manage and create best practices, new ideas, and break through processes. From the data collected and analyzed the researchers wrote the book *Working Knowledge: How organizations manage what they know* and described the concept of working knowledge in detail. The conclusions related to the present study were: a working definition for rules-of-thumb – "flexible guides to action that developed through trial and error and over long experience and observation" (p. 10) and "Rules-of-thumb…are shortcuts to solutions to new problems that resemble problems previously

solved by experienced workers. Those with knowledge see known patterns in new situations and can respond appropriately….So knowledge offers speed; it allows its processors to deal with situations quickly, even some very complex ones that would baffle a novice" (p. 11).

Another researcher, Tiwana (2002) created *The Knowledge Management Toolkit*. Tiwana states this book provides a strategic roadmap for implementing knowledge management within a company. He states, "this book is built on lessons learned from years of cumulative research spanning several countries and hundreds of companies, big and small, in diverse industries" (p.xxiv). Tiwana does not discuss the methodology of his research. The conclusions related to the present study were: as a person's job experience increases, so does that person's knowledge. The repertoire of shortcut solutions within the individual continuously increased from experience. These shortcut solutions were personal internal scripts that guided our thinking toward useful solutions to the vast array of problems encountered on the job. The shortcut solutions or scripts match patterns of what was experienced in the past to what may be required as solutions to problems in the present. These scripts were commonly called rules-of-thumb or heuristics. "Such *rules of thumb* or *heuristics* provide a single option out of a limited set of specific, often approximate approaches to solving a problem or analyzing a situation accurately, quickly, and efficiently" (Tiwana 2002, p. 46). As employees' repertoire of rules-of-thumb increased, so did their value to their organization. These rules-of-thumb were mostly tacit and embedded within the person. That individual personal tacit knowing was difficult to manage. He believed, "tacit knowledge, however complex to

understand and manage, holds the promise for long-lasting impact if we can successfully tap into even a fraction of what is available" (p. 47).

Returning to a practical example of exploration of rules-of-thumb, Hesketh et al. (2002) studied rules-of-thumb as they relate to firefighting training. The researchers wanted to learn if firefighters learned by example or from general firefighting rules-of-thumb or both? This study investigated whether a firefighter's previous experience, text book knowledge, personal rules-of-thumb, and relevant examples impacted the firefighter's decision-making and learning. The researchers used the following methodology. Thirty-four new recruits participated in the study. The recruits received various firefighting scenarios with examples of what to do as well as rules-of-thumb regarding what to do. The recruits responded how they would approach each scenario. The researchers recorded and analyzed all responses. The conclusions related to the present study were: the use of rules-of-thumb increased as the number of good examples increased. Rules-of-thumb appear to work across similar situations. And trainees were more likely to use rules-of-thumb under time pressure.

Another practical study including rules-of-thumb was Andre et al. (2002). The researchers examined the rules-of-thumb of general practitioners. The study's objective was to understand and use rules-of-thumb as a way to discover tacit knowledge in general practitioners. The researchers used the following methodology. The study was exploratory and descriptive. The researchers conducted interviews with four focus groups created from 23 general practitioners asking each group of general practitioners if they can recognize and also use rules-of-thumb. The researchers defined rules-of-thumb as "a mental pattern that could be made conscious, used during consultation, was action-

oriented, used whether or not the background for the rule was understood, and was not based upon knowledge of the patient…" (p. 618). An example given to the focus group was, "when a patient is able to bear weight upon a leg it isn't broken" (p. 618). The researchers recorded, transcribed, and analyzed the focus group interviews. The conclusions related to the present study were: general practitioners did recognize rules-of-thumb and could produce specific examples. Rules-of-thumb originated from colleagues and transferred by word-of-mouth. And, practitioners used rules-of-thumb to simplify and expedite their work.

Andre et al. (2003) continued to investigate rules-of-thumb used by general practitioners further analyzing the data from their previous study, Andre et al. (2002). The researchers' objective was to understand the application of rules-of-thumb across different situations in general practice. The study was descriptive, exploratory, and a deeper analysis of the original study data of 23 general practitioners using an inductive editing analysis procedure. The conclusions related to the present study were: rules-of-thumb provided rapid assessment, individualized and generalized processes, contained probability reasoning and risk assessment features, and balanced between a practitioners individual and general perspective.

Another way to think about rules-of-thumb is as a synonym of advice. Burns and Schaefer (2003) explored the unstructured learning experiences of trade and industrial teachers. The study's objective was to provide evidence that informal learning takes place amongst new teachers. The study focuses upon lessons learned and past experiences both components of rules-of-thumb. The researchers used the following methodology. The study used an action research approach and lasted three years. The

authors asked 50 trade and industrial teachers of varying years of experience to write survival memos to their successors offering teaching advice. The teachers then placed the survival memo advice into relevant categories. Results were analyzed using data reconstruction. The conclusions related to the present study were: new teachers acquired a broad extent of informal learning during their first year of service. The informal learning and expertise included instrumental (how-to) advice, emotional advice, and political advice. Collecting survival memos or informal advice was an insightful way to understand what works for you might also work for me.

Where do rules-of-thumb come from? Bailey and Gainsburg (2003) examined knowledge in technical work. The objective of the study was to understand the nature and source of knowledge within the technical work of civil structural engineers. The researchers used the following methodology. The study was an ethnography spanning three years. The researchers investigated civil engineers at three firms. The firms employed from 4 to 30 civil engineers. Data collection included observations, conversations, interviews, note taking, and document analysis. Coding and analysis consisted of multiple readings and categorizing types of knowledge displayed and compared against a typology of engineering knowledge existing in the literature. The conclusions related to the present study were: rules-of-thumb were "historically established knowledge and passed down from senior engineers to junior ones, taught in school, or codified" (p. 35). Engineers used rules-of-thumb in design analysis and as shortcuts to get a head start in their work. Also noted, engineers generated new rules-of-thumb from personal experience and relationships with other engineers.

Next, consider Tucker and Edmondson (2003). In a study of organizational

learning, the researchers examine how employees respond to problems encountered on

the job. The objective of the study was to understand how problem solving is enabling or

preventing positive organizational change. The researchers used the following

methodology. The researchers followed a qualitative approach. From 239 hours of

observation of dominant problem solving patterns of 26 nurses at 9 hospitals, and

corresponding interviews of 12 nurses at 7 of those same hospitals, Tucker and

Edmondson noted and analyzed failures and problems. Two implicit strategies appeared

indicating first-order problem solving. The authors considered these strategies two rules-

of-thumb the nurses used. "The first rule of thumb is as follows: when you encounter a

problem, do what it takes to continue the patient-care task – no more, no less" (p. 61).

"The second rule-of-thumb was – when necessary for continuity of patient care – ask for

help from people who were socially close rather than from those who were best equipped

to correct the problem" (p. 61). The conclusions related to the present study were: rules-of-

thumb offered consistency and self-preservation because of consistency of response. And

tacit problem solving power in time-pressured situations preserved a nurse's reputation

within the hospital.

What do rules-of-thumb do? In a study of conceptual understanding, scientific

reasoning, and transfer ability, Ryan and Kolodner (2004) examined rules-of-thumb in

the classroom. The objective of the study was to understand if rules-of-thumb practices

would enhance conceptual learning and scientific reasoning in project-based classrooms.

The researchers used the following methodology. The researchers employed an

experimental study where students would create, record, and share rules-of-thumb within

the project-based classrooms. Three eight grade science teachers and their classes

participated in the same academic year. The researchers collected, coded, and analyzed

the students' rules, records, and sharing. Initial findings suggested the student's work

lacked a depth of conceptual knowledge regarding the project at hand. Then the

researchers introduced a template to enhance the creation, recording, and sharing of rules-

of-thumb during a scientific project. The template was as follows:

> When (describe the action, design, or choice you are working within),
>
> use/connect/build/employ/measure (list your suggestion or method)
>
> because (list or supply the science principle or concept here that backs up your
> suggestion) (¶ 7).

Use of this template enhanced the students' conceptual ability, scientific

reasoning, and transfer of knowledge. Also, student discussion of rules-of-thumb

increased following the use of the template. The conclusions related to the present study

were: rules-of-thumb proved to be an effective vehicle to link phenomena to the scientific

principles behind that phenomenon. A rule-of-thumb template enhances conceptual

ability, scientific reasoning, and transfer of knowledge.

The following study describes rules-of-thumb by how they are used; by whom

they are used; and by what this concept does or does not do. Leonard and Swap (2005)

completed a multiyear exploratory and descriptive study examining a phenomenon they

called *Deep Smarts*. The objective of the study was to understand how experienced

individuals transfer their knowledge and also how to cultivate and transfer 'enduring

business wisdom.' The researchers used the following methodology. The authors

interviewed and analyzed the data collected from 34 informants from 35 companies over

a two year period. The principle finding of the study was Deep Smarts had six critical

components. These components were: experience, expertise, patterns, beliefs, social

influences, and rules-of-thumb. The conclusions related to the present study were: rules-of-thumb were a component of Deep Smarts. A definition of rules-of-thumb was, "experts often rely on transferring rules of thumb: shorthand, decontextual statements that summarize a great many patterns into one simple, memorable – and usually reliable – rule. Novices frequently find rules of thumb useful shortcuts and guidelines to more contextual knowledge, and coaches rely on them to transfer knowledge quickly and efficiently" (p. 195). And, rules-of-thumb were a critical part of the knowledge transfer process.

From seven years of research investigating intuition at the Max Planak Institute of Human Development, Gigerenzer (2007) wrote the book *Gut Feelings: The intelligence of the unconscious.* The book presents how simple rules-of-thumb help everyday people do what they do and succeed. Gigerenzer did not state a methodology. The conclusions related to the present study were: rules-of-thumb were building blocks for more rules-of-thumb. Use of one rule-of-thumb lead to another and another and others all supporting the previous rule-of-thumb. Rules-of-thumb were gut feelings.

Finally, in a study of the expertise in a vocational context, Farrar and Trorey (2008) examined the vocation of dry walling. The objective of the study was to understand how these craftsmen develop and communicate their expertise. The researchers used the following methodology. The study was exploratory and descriptive. The participants were college students attending a dry stone walling class. The participants had varying degrees of experience from beginner to expert. The authors used unstructured interviews, conversations, and observations to collect data, most often during the actual construction of stone walls, when the participants were working.

Questions asked were: Are there rules to walling? What rules did you use? Why did you

use them? What was the reason? The researchers analyzed the results and reviewed the

findings with the participants for accuracy and validity. The conclusions related to the

present study were: the wallers learned by trial and error and reflection upon their

progress and success. The participants learned by simple rules-of-thumb or maxims.

"Maxims are important as a way of communication, as a way of transmitting and building

knowledge. They are freely expressed, but as condensed knowledge, and can be not only

codes for the experts, but also vehicles for the learner" (p. 42). The wallers demonstrated

tacit knowledge and intuition as they worked. Having conversations allowed and

revealed the element of emotional involvement the participant had for his or her work

suggesting that this craft, dry stone walling, was complex and can not be reduced to a

single set of concrete explicit rules. Time, practice, reflection, and peer support develop

expertise or personal knowledge and maxims also known as rules-of-thumb were the

vehicles to share that expertise and knowledge.

Rules-of-Thumb Section Summary

The previous section presented the literature reviewed by the researcher regarding

rules-of-thumb. Shortcut statements and contextual narratives provided the most

meaningful method of review for the researcher as the following rule offers.

RRT-16   Every person learns differently. Honor that thought in yourself and in
             others.

From this review the researcher asserts the following. Rules-of-thumb exist.

Rules-of-thumb were important in workplace knowledge. Rules-of-thumb were abstract

and not easily understood. Rules-of-thumb may be an expression of tacit knowledge.

And rules-of-thumb deserved a deeper exploration. The next section continues with a

review using the same format. The topics of review are tacit or explicit knowledge.

Tacit or Explicit Knowledge

Below are 20 studies the researcher examined regarding tacit or explicit

knowledge. Each study contains only shorthand statements paraphrasing the important

insights regarding tacit or explicit knowledge within that study. After the shorthand lists

of the 20 studies a full summary of each study follows in the section entitled Tacit or

Explicit Knowledge Contextual Narratives. The review begins below.

Tacit or Explicit Knowledge Shorthand Lists

Polanyi (1966) relevant insights:

- "We know more than we can tell" (p. 4) illustrates tacit knowledge.
- Two types of knowledge exist – tacit and explicit.

Nonaka (1994) and Nonaka and Takeuchi (1995) relevant insights:

- Developed a Theory of Organizational Knowledge Creation.
- Tacit knowledge is within the mind and body of the person.
- Explicit knowledge is articulated and able to be duplicated.
- Knowledge creation is the interplay of tacit and explicit knowledge in an expanding spiral motion.
- Four modes of conversion or interplay exist: tacit to tacit, tacit to explicit, explicit to explicit, and explicit to tacit thus completing the spiral and creating new knowledge.

Cook and Brown (1999) relevant insight:

- Tacit and explicit knowledge need each other as each does the work the other can not do.

Zack (1999) relevant insights:

- Tacit knowledge has little value as it may not be expressed or known.
- Organizations can manage explicit knowledge.

Haldin-Herrgard (2000) relevant insights:

- Tacit knowledge is difficult to diffuse due to perception, language, time, value, and distance.
- People are not fully aware of the broad knowledge within themselves.
- Explicit knowledge is easily expressed and recognized.
- Explicit knowledge is easily shared and duplicated.
- Tacit knowledge is found deep within the person and is difficult to express.

Stenmark (2000) relevant insights:

- A personal preference is an example of tacit knowledge.
- Why we know and do is difficult to express and possibly un-expressible.
- Explicit knowledge is easily captured, codified, searched, and retrieved. Tacit knowledge is not.

Ambrosini and Bowman (2001) relevant insights:

- Tacit knowledge is difficult to study as it resists operationalization.
- Limited empirical studies exist regarding tacit knowledge.
- Use interviews and observations to operationalize tacit knowledge.

Haldin-Herrgard (2001) relevant insights:

- Twenty-three definitions of tacit knowledge exist.
- Tacit knowledge is found with the individual, group, and organization.
- Epitomes of tacit knowledge include rules-of-thumb, intuition, gut feelings, and practical intelligence.

Herschel, Nemati, and Steiger (2001) relevant insights:

- Rich narratives facilitate the conversion of tacit to explicit knowledge.
- Structured recall enhances the recall of shared tacit knowledge.

Grimaldi and Torrisi (2001) relevant insights:

- Tacit knowledge is procedural in nature.
- Tacit knowledge may or may not be articulated.
- Tacit and explicit knowledge co-exist and are interdependent.

Linde (2001) relevant insights:

- Narratives express and transmit tacit knowledge.
- Language is the most tacit form of tacit knowledge.
- One knows how to speak but cannot articulate how one does it.
- Narratives connect tacit to explicit knowledge.

Brockman and Anthony (2002) relevant insight:

- Tacit knowledge, as it is difficult to operationalize, limits research.

Haldin-Herrgard (2003) relevant insights:

- "Tacit knowledge is found in almost every publication on knowledge management yet there is a lack of empirically-based discussion on the importance of it" (¶ 1).
- Tacit knowledge can be located and mapped.

Gichuru and Tobin (2004) relevant insights:

- Tacit knowledge requires face-to-face interplay for diffusion.
- Time and distance are noted barriers to tacit knowledge diffusion.
- Mentoring, informal gatherings, reflections, and sharing sessions may help tacit knowledge diffusion.

Blow (2005) relevant insights:

- Experts could use a coach to assist them in expressing and sharing what they know.
- Experts use words that have limited meaning outside of their domain.
- When tacit knowledge is not passed on, others have to rediscover the knowledge.

Foos, Schum, and Rothenberg (2006) relevant insight:

- Tacit knowledge and tacit knowledge transfer remain unclear among participants of study.

Janson and McQueen (2007) relevant insights:

- Tacit leadership knowledge can be expressed and recorded by using the proper interview techniques.
- Eliciting participant stories create mini-case studies for understanding tacit insights.
- Tacit knowledge is not easily transferred into how-to explicit instructions.
- Tacit knowledge can not be taught.
- Tacit knowledge must be built through insight, experience, and reflection.

Peroune (2007) relevant insights:

- Peer relationships impact tacit knowledge in the workplace.
- Trust, dialogue, organization size, wavelength, and fear exist and impact the codification of knowledge.

Johnson (2007) relevant insights:

- Tacit and explicit are adjectives modifying a noun – knowledge or knowing.
- Tacit knowledge is potential activity.
- Explicit knowledge is potential knowledge.
- The best way to manage knowledge is to manage the person by having him or her direct their knowledge effectively.
- Theories incorporating tacit knowledge are mostly conceptual.

Håkanson (2007) relevant insights:

- The allure of tacit knowledge draws interest and attention away from explicit knowledge research.
- Literature regarding tacit knowledge is unclear and confusing.

Tacit or Explicit Knowledge Contextual Narratives

The following narratives summarize the 20 studies reviewed regarding tacit or explicit knowledge. A summary appears at the end of this section. The review begins below.

When Polanyi (1966) proposed to the world that, "we know more than we can tell" (p. 4), he was referring to tacit knowledge. Polanyi proposed two types of knowledge, tacit and explicit. Tacit knowledge resided deeply embedded within the person and was difficult if not impossible to completely express, manage, or share. Explicit knowledge was external and available to all. We articulate, communicate, and share our explicit knowledge in a myriad of ways.

The literature reviewed by the researcher and this document created by the researcher are examples of explicit knowledge. In a sense, explicit knowledge lies on the surface exposed for use and review. Tacit knowledge lies deep within us – hidden, mysterious, and potentially valuable.

To tell what we can know, Polanyi suggested the concept of indwelling or deep reflection within our knowing. These thoughts and words were very abstract. Nonetheless, tacit knowledge as a concept grew in presence within the knowledge community. The allure of tacit knowledge became a driving force in the knowledge management and organizational knowledge domain because of its possible value yet illusive structure. Various theoretical and empirical work expressed the interest of researchers regarding tacit and explicit knowledge. Consider the following.

Nonaka (1994) created the 'Theory of Organizational Knowledge Creation.' Nonaka and Takeuchi (1995) expanded the above theory with the publication *The Knowledge Creating Company*, a widely cited book within knowledge management literature. Polanyi's (1966) *Theory of Tacit Knowledge* influenced much of their work.

In a study of organizational innovation Nonaka and Takeuchi (1995) examined the relationship between tacit and explicit knowledge. "The goal of this study was to formalize a generic model of organizational knowledge creation" (p.ix). The researchers employed a case study methodology. Twenty organizations participated. The researchers included Japanese and United States organizations. Data collection consisted of in-depth personal interviews with 130 corporate managers during the 1980's. The analysis constructed a new theory of organizational knowledge creation. The conclusions related to the present study were: an ability to distinguish between tacit and explicit knowledge, the interaction of tacit and explicit knowledge occurred at the individual level, organizational knowledge occurred at the group level, and knowledge creation was a cyclical and interactive process. Tacit knowledge was within the mind and body of the individual. Explicit knowledge was external to the individual, expressed, articulated, and

duplicated. Four patterns of interaction existed within organizational knowledge creation described as a conversion process between tacit and explicit knowledge. 'Socialization' was where tacit knowledge interacts with tacit knowledge. 'Externalization' was where tacit knowledge becomes externalized and explicit. "Combination" was where the explicit knowledge becomes distributed explicit knowledge. And, 'Internalization' was where the indwelling upon explicit knowledge occurs and thus explicit knowledge becomes tacit knowledge again. This interplay of knowledge creation formed a spiral – always expanding and moving or creating.

In a study of knowledge and knowing, Cook and Brown (1999) examine the interplay between tacit and explicit knowledge. The objective of the researchers' work was to develop more understanding regarding tacit and explicit knowledge in relationship with knowledge and knowing. The researchers used the following methodology. The researchers investigated three case studies: Nonaka and Takeuchi (1995) regarding machine design, flute making at three Boston-area workshops, and innovation processes with a group of Xerox engineers. The researchers constructed a framework of knowledge and knowing and through this framework analyzed the cases. The conclusions related to the present study were: tacit and explicit knowledge needed each other as one does the work the other can not do. Tacit and explicit knowledge were important types of knowledge existing within the individual, group and workplace.

Questions existed in the literature, which knowledge is more important, tacit or explicit, or are both of equal importance? In a study about managing codified knowledge Zack (1999) examines organizational explicit knowledge. The objective of the study was to understand the use and management of explicit knowledge. The researchers used the

following methodology. The researcher analyzed two cases studies of organizations managing explicit knowledge: an international company providing industry analysis and market information, and an international chemical company. The conclusions related to the present study were: tacit knowledge has little value because if it was truly tacit expression articulation was not possible. Expressed or articulated knowledge was explicit. Organizations could study explicit knowledge and its capacity and potential. Therefore, organizations could manage explicit knowledge. Researchers and organizations could not study tacit knowledge because they could not capture or grasp what they could not express or articulate.

However, the scientific community considered tacit knowledge much more intriguing and continued to produce literature regarding aspects of tacit knowledge within the workplace and beyond. Consider the following examples.

In a study of the literature regarding the sharing of tacit knowledge in organizations Haldin-Herrgard (2000) examined difficulties of tacit knowledge diffusion within organizations. The objective of the study was to "set a theoretical foundation for studies on the sharing of tacit knowledge in organizations" (p.361). Difficulties related to perception, language, time, value, and distance exist with perception and language most problematic. The conclusions related to the present study were: people were not fully aware of the broad range of knowledge present within them. People could express explicit knowledge. The individual easily expressed and recognized explicit knowledge therefore human language easily shared and duplicated explicit knowledge. Yet, language created a barrier to tacit knowledge sharing simply because the individual held tacit knowledge in a non-verbal form embodied deep within the person. Haldin-Herrgard

likened explicit knowledge to the tip of an iceberg and tacit knowledge to all the knowing held below the surface.

Nonetheless interest in the illusive tacit knowledge continues. In a study of tacit knowledge, Stenmark (2000) explored turning tacit knowledge tangible within agent-based information and document retrieval systems. The objective of the study was to understand how tacit knowledge may become tangible within an organizational setting. The researcher used the following methodology. Eighty information technology professionals participated. All worked within the same firm. Data collection included individual and group interviews, on-line questionnaires, and a review of participant log files. A grounded theory approach guided the analysis. The conclusions related to the present study were: people were able to determine that a given document or parts within it were interesting to them but could not express why. Personal preference was an example of tacit knowledge and the reason behind the interest and attraction was difficult to express. And, people only shared knowledge when personally motivated to do so.

"All this strongly suggests that tacit knowledge is an important phenomenon to study. Nevertheless, tacit knowledge has up to now resisted operationalization. The literature as a whole has remained conceptual" (Ambrosini & Bowman, 2001, p. 811). Ambrosini and Bowman suggest interviews and observations may enable a researcher to operationalize tacit knowledge and allow productive investigation. Attempts to operationalize tacit knowledge for study continue.

For example, Herschel et al. (2001) examined the role of knowledge exchange protocols within tacit to explicit knowledge conversion. The objective of their study was to examine whether a structured narrative protocol or a structured recall protocol

enhanced a learner's understanding and articulation of a topic. The researchers used the following methodology. The study was experimental. The authors created two videos offering student counseling information. One video presented a rich structured narrative and followed a protocol and the other did not. The other video was a free form narrative. Two hundred thirty-eight business students participated. Two groups formed. One group watched the structured video the other watched the free form video. One group expressed what they learned in a free form manner. The other group used a structured recall – a recall protocol – prototype to assist with recall and expression of what they learned. The researchers recorded and coded the data. Results were analyzed using statistical methods. The conclusions related to the present study were: rich narratives may facilitate the conversion of tacit to explicit knowledge but the effectiveness of the knowledge may depend upon a structured recall method.

Another approach to realize tacit knowledge was to codify it or reduce it to a code. Grimaldi and Torrisi (2001) examined the codification of tacit knowledge. The objective of the study was to understand the nature of tacit vs. explicit knowledge shared during collaboration. The researchers used the following methodology. Their case study examined five firms within the software industry to determine which industry activities lead to the codification of knowledge; which types of knowledge are codified and why; which types of knowledge remain tacit; and, the nature of this knowledge as it related to sharing and exchange with partners during collaboration. The researchers interviewed two technical managers from each firms, then recorded and analyzed the results. The conclusions related to the present study were: tacit knowledge was procedural and may or may not be articulated. Knowledge was articulated and codified when a codebook

becomes apparent. And, tacit and explicit knowledge co-existed and were

interdependent.

Although the thought of tacit and explicit knowledge coexisting and being

interdependent was becoming more prevalent with the literature, the focus still remained

upon tacit knowledge. Another example was the next study.

Linde (2001) examined the role of narratives in the expression and transmission

of tacit knowledge within the work of insurance sales agents. The objective of this study

was to understand tacit social knowledge. The researcher used the following

methodology. The researcher used an ethnographic approach. The study lasted three

years. During that time the researcher interviewed and observed sales agents and also

observed training programs, conventions, task forces, meetings, and the day-to-day

routines of the sales force. The researcher recorded and analyzed all data. The

conclusions related to the present study were: individual tacit knowledge, specifically

language, was perhaps the most tacit form of tacit knowledge as one knows how to speak

but cannot articulate how one did it. Knowledge about one's identity, work practices,

and work history was particularly important and conveyed by narratives. Narratives

provide the bridge to move from tacit to explicit knowledge. Explicit social knowledge

appeared as forms, written procedures, formal documents, within file cabinets, and

databases. Tacit knowledge resided within the person, group, or organization and relied

upon action or articulation to be recognized.

Consider this quote found within the research implications of a study. "The

strategic literature is lacking in empirical studies addressing tacit knowledge and

intuition. One reason may be that the very nature of tacit knowledge makes the variables

difficult to operationalize" (Brockman & Anthony, 2002, p. 449). Tacit knowledge has been the focus of discussion for years and the scientific community still suggested that operationalizing tacit knowledge continued to remain a problem.

In addition to the problem of operationalizing tacit knowledge consider this next statement. "Although tacit knowledge is a part of almost every publication on knowledge management, there is a lack of a profound and empirically based discussion on the importance of tacit knowledge" (Haldin-Herrgard, 2003, ¶ 1).

Haldin-Herrgard (2001) conducted a comprehensive literature review regarding the meaning of tacit knowledge. The objective of the study was to understand and clarify the concept of tacit knowledge found in academic literature. The researcher found tacit knowledge had more than one meaning. The study revealed 23 definitions of tacit knowledge found within the academic literature written from 1956 through 2002 with the most common being Polanyi's (1996, p. 4) "we know more than we can tell." The researcher then distilled these definitions into epitomes of tacit knowledge with intuition, skills, insight, know-how, beliefs, mental models, practical intelligence, and rules-of-thumb were the most widely used epitomes by scholars. This comprehensive examination revealed the literature considered tacit knowledge was personal, abstract, gained from experience, and not easily expressed or not expressed at all. Tacit knowledge existed embodied within individuals, groups, and the collective organization as ETKs.

Continuing with her interest in tacit knowledge, Haldin-Herrgard (2003) explored the mapping of tacit knowledge. The objective of the study was to develop a method of studying and verifying tacit knowledge. The researcher used the following methodology.

The researcher intended to develop a method to study and map tacit knowledge. The researcher believes epitomes of tacit knowledge (ETK), previously studied by Haldin-Herrgard (2001), such as intuition, skills, insight, know-how, beliefs, mental models, practical intelligence, rules-of-thumb, gut feelings and others can be mapped and located within an organization and its people. Haldin-Herrgard mapped ETKs at a financial firm in Finland. Using interviews and ETK cards she was able to locate and map tacit knowing within individuals and the organization. Using the cards, the participants would determine which card held an epitome of tacit knowledge and where it was located. This location of tacit knowledge revealed its value, meaning, and use. The conclusions related to the present study were: ETKs operationalized tacit knowledge and rules-of-thumb were an ETK.

However, the concept of tacit knowledge continued to remains abstract. Further research persisted asking what is tacit knowledge and where is it found?

In a study of tacit knowledge diffusion, Gichuru and Tobin (2004) examined what tacit knowledge is, where tacit knowledge is, and challenges regarding the diffusion of this type of knowledge. The objective of the study was to identify the challenges of tacit knowledge diffusion and rank them in order of importance. The study used the following methodology. The study used survey methods. The site selected was Eli Lilly, SA, a global pharmaceutical company. The researchers collected data with a self-administered survey questionnaire sent to all employees. Results were analyzed using comparison and ranking methods. The conclusions related to the present study were: tacit knowledge was highly personal, distance and time constraints were barriers to the face-to-face interplay necessary to diffuse this knowing. Tacit knowing was within the individual it was highly

mobile and difficult to quantify in an objective manner for relative value. Suggestions for diffusing tacit knowing were to support mentoring practices; encourage informal gatherings; encourage reflection on all project activities; and, encourage sharing and spreading what any one individual knows with all others who may benefit. 'Sharing' specifically 'what one knows' appeared to surface as an important thought deserving more consideration.

Could the notion of 'what one knows' be expertise? In a study of the transmission of expertise Blow (2005) examined coaching strategies. The objective of the study was to understand if coaching strategies help experts share expertise. The methodology follows. The study used a phenomenological approach for data collection and analysis. The researcher explored the experiences of 19 participants with the cross-section of seven experts, six coaches, and six coachees. Data collection was with semi-structured interviews to determine if experienced people find it difficult to pass on their expertise. The conclusions related to the present study were: "experts also tend to use words that have both a limited technical meaning and different popular associations: an example is "tacit knowledge" (p. 1). Experts would welcome a coach to assist them to understand their intuitive knowing and express this knowledge in a way others could implement and use.

Keep in mind, all studies reviewed thus far, investigated humans, not machines, not software, not artificial intelligence, only humans. The literature suggested tacit knowledge was within a person and explicit knowledge was external to the person. But what was the role of humans with regard to knowledge? What did humans do with knowledge?

Do humans share or transfer knowledge? In a study of tacit knowledge transfer Foos, et al. (2006) examined the factors that influenced the tacit knowledge transfer between two product development partners among three companies. The objective of the study was to understand the integration of tacit knowledge from an external source. This explorative study used qualitative and quantitative methods. The authors conducted 13 interviews with senior managers, middle managers, and project managers from three companies working in external technology integration. An online survey collected data from project managers of 39 technology integration projects across five different companies. Results were analyzed using thematic and statistical analysis. The conclusions related to the present study were: participants did not understand the concept of tacit knowledge and the process of tacit knowledge transfer. "As our findings suggest it is not clear that perceptions of tacit knowledge transfer are accurate or consistent among different levels of the organization. Much more research is needed in the development of this measure" (p. 16).

The study above was similar to others saying tacit knowledge was abstract, poorly understood, and confusing. However in this study the literature introduced a new term – transfer. This was the first time during this review the concept "tacit knowledge transfer" appeared. Until this article, the common notion was "tacit knowledge sharing." Was there a difference? The sections Knowledge Transfer and Knowledge sharing within this chapter may illuminate the difference.

A more recent study again focuses upon tacit knowledge. Janson and McQueen (2007) examined tacit leadership knowledge. The objective of the study was to understand the knowledge building processes of leadership. The researchers used the

following methodology. The researchers selected 31 participants who were leaders or potential leaders working in scientific and technological innovation. Data collection was by interview. Results were analyzed using thematic analysis. The conclusions related to the present study were: by using appropriate interview techniques, such as eliciting participant stories, the researchers found tacit knowledge expressed and recordable. Tacit knowledge does not easily transfer into explicit how-to instructions. "Tacit knowledge cannot be "taught – it must be built through insight, experience and reflection. In particular, leadership tacit knowledge was hard to build….Leadership tacit knowledge has traditionally been built though apprenticeship and mentoring experiential processes…" (p. 658). The researchers suggested the use of mini case studies as collected from experts to act as 'hooks' for learners to build upon and gain access to the insights, experiences, and potential of expert leaders.

Also investigating tacit knowledge in the workplace, Peroune (2007) examined the relationship of peer relationships and tacit knowledge. The objective of the study was to understand the role of one's peers has in making tacit knowledge explicit. The methodology follows. The study used a case study methodology. The site was a small printing firm. Five individuals working in that firm participated. Data was collected using semi-structured interviews. Results were analyzed using thematic analysis. The conclusions related to the present study were: trust, tacit knowledge, dialogue, company size, wavelength, and fear existed within the context of peer relationships and the codification of knowledge. Each of these constructs contributed to the potential to make tacit knowledge explicit and accessible to the larger organization. The conversion of tacit to explicit knowledge required more research.

The conversion of tacit to explicit knowledge still interested researchers. Yet as the next quote suggests, interest in tacit knowledge existed but operationalizing tacit knowledge still remained challenging even after years of consideration.

"Although many fundamental theories in the strategy and management literatures incorporate the importance of knowledge and particularly the notion of tacit knowledge few operationalize it" (Johnson, 2007, p. 123).

In a theoretical research paper regarding tacit knowledge Johnson (2007) examined the creation of tacit knowledge. The objective of this work was to propose a pattern recognition and synthesis framework for tacit knowledge creation. Johnson offered several interesting thoughts within his article regarding tacit and explicit knowledge. The conclusions related to the present study were: the terms tacit and explicit were adjectives and modifying the nouns knowledge or knowing. Tacit knowledge was a potential activity and explicit knowledge was potential knowledge. The choice of tacit or explicit determined a path to follow to manage, understand, and use knowledge or knowing. The best way to manage knowledge was by managing the person. Manage the person to use, increase, and direct his or her knowledge most effectively.

Finally, consider this quote from Håkanson (2007): "In a whole range of areas, including strategy, organization, knowledge management, science policy and others, 'tacit knowledge' has become a fashionable brand of snake oil, invoked to explain a wide and disparate range of phenomena, both merely hypothetical ones and ones actually observed. However, in reviewing the literature the reader is struck by the extreme conceptual ambiguity, theoretical confusion and lack of agreement characteristic of the

way the term is being used. Moreover, the present interest in the tacit aspects of

knowledge has tended to divert attention from the economically obvious significance of

its converse, explicit or articulated knowledge, and, by implication, the importance of

articulation, the process through which tacit skills and knowledge are made explicit" (p.

51).

The researcher of the present study recalled what he would consider an ancient

rule-of-thumb. "Through faith we understand that the worlds were framed by the word of

God, so that things which are seen were not made of things which do appear" (Hebrews

11:3 – Authorized King James Version). Perhaps the realm of tacit knowledge deserves

an open-minded inquiry into what could be, and then build upon those thoughts.

Tacit or Explicit Knowledge Section Summary

The previous section presented, in both shorthand statements and narrative, the

literature reviewed by the researcher. He realized from this section how abstract and

confusing tacit knowledge was within the scientific community. Also noted, interviews,

observations, and person-to-person interactions may bring tacit knowledge into a form

one may study. The review presented several attempts to operationalize and understand

tacit knowledge. The review suggested explicit knowledge is important too. Explicit

knowledge complimented tacit knowledge, coexisted with tacit knowledge, and was

interdependent with tacit knowledge. Explicit knowledge was easy to find and study.

However, the literature reviewed implied explicit knowledge was secondary to tacit

knowledge in interest, value, and exploration.

The next section presents a review of the literature for this study regarding

Knowledge Transfer.

Knowledge Transfer

Below are 11 studies the researcher examined regarding knowledge transfer. Each study contains only shorthand statements paraphrasing the important insights regarding knowledge transfer within that study. After the shorthand lists of the 11 studies a full description of each study follows in the section entitled Knowledge Transfer Contextual Narratives. The review begins below.

Knowledge Transfer Shorthand Lists

Szulanski (1996) relevant insights:

- 'Stickiness' denotes the barriers and difficulty of knowledge transfer.
- Stickiness factors include: absorptive capacity, causal ambiguity, and arduousness of relationships within the transfer act.
- Transfer is a movement of knowledge not a diffusion of knowledge.

O'Dell and Grayson (1998) relevant insights:

- Knowledge begins at the individual level and moves collectively outward.
- Knowledge transfer consists of seven steps.

Davenport and Prusak (2000) relevant insights:

- Two critical actions of knowledge transfer are the transmission of knowledge and absorption of that knowledge.
- Knowledge transfer's goal is to improve processes and increase value.
- Barriers include a lack of the following: trust, time, opportunity, self-esteem, and the existence of pride, stubbornness, fear – all human qualities.

Herschel et al. (2001) relevant insights:

- Structured protocols for presentation and recall affect knowledge transfer.
- Rich narratives enhance the presentation and recall of tacit knowledge.

Hinds et al. (2001) relevant insights:

- Expertise affects knowledge transfer.
- Expert knowledge is abstract.
- Beginners and novices use concrete language.
- Experts have difficulty conveying what they know.

Kane, Argote, and Levine (2005) relevant insights:

- Personnel rotation impacts knowledge transfer.
- Trusting knowledge and credibility of the person rotated into a group impacts transfer.

Blow (2005) relevant insights:

- The transfer of knowledge within an organization is a social process.
- Experts do not transfer knowledge as effectively as they could.
- Coaches help experts express what they know.

Newell, Bresnen, Edelman, Scarbrough, and Swan (2006) relevant insights:

- Sharing of process knowledge is more useful than sharing of product knowledge.
- Capture and sharing of lessons learned is a common knowledge transfer strategy.

Foos et al. (2006) relevant insights:

- Trust impacts tacit knowledge transfer.
- Relationships impact tacit knowledge transfer.
- Due diligence impacts tacit knowledge transfer.
- In most cases tacit knowledge transfer is poorly understood.

Landry, Amara, and Ouimet (2007) insight:

- Knowledge transfer research is scarce.

Janson and McQueen (2007) relevant insights:

- Tacit knowledge is not easily transferred.
- Leadership tacit knowledge is valuable and a source of competitive advantage.

Knowledge Transfer Contextual Narratives

The following narratives summarize the 11 studies reviewed regarding knowledge transfer. A summary appears at the end of this section. The review begins below.

This section presents insights regarding how knowledge moves or passes from one person or entity to another. The review of knowledge transfer begins with the following study.

In a study of organizational knowledge, Szulanski (1996) explored the internal stickiness of knowledge transfer. The object of his study was to understand the ability of an organization to transfer best practices. The study used the following methodology. A two-step questionnaire collected the data. The data set consisted of 271 observations of 122 best practices transfers in 8 companies. Results were analyzed using statistical analysis. The conclusions related to the present study were: internal stickiness was the degree of difficulty of transferring knowledge within an organization. Three barriers reduced transfer of best practices. The barriers were lack of absorptive capacity, causal ambiguity, and arduousness of the relationship between the source of the knowledge and the recipient. These factors go beyond motivational factors. The distinction between transfer and diffusion was important. Transfer was a distinct movement of knowledge whereas diffusion was a gradual dissemination of knowledge.

Influenced by Szulanski's (1996) work, O'Dell and Grayson (1998) presented a model of knowledge transfer within their book, *If Only We Knew What We Know: The transfer of internal knowledge and best practices.* The researchers developed their model of knowledge transfer from their previous case studies of companies regarding benchmarking and transfer of best practices. The researchers believed that internal transfer consisted of finding out what you know and then using it to improve performance. From that thought, they constructed their model of transfer. The model consists of seven steps:

1. create knowledge
2. identify knowledge
3. collect knowledge
4. organize knowledge

5. share knowledge
6. adapt to new uses of this knowledge, and
7. then repeat the process from this point of knowing.

Within their model of knowledge transfer, O'Dell and Grayson (1998) explain

that there were three essential components to knowledge transfer: value propositions,

enablers, and four-phase change. A conclusion related to the present study was:

knowledge began at the individual level and expanded into and through the organization

via transfer.

Davenport and Prusak (2000), previously summarized in this chapter, examined

organizational knowledge or as they called it, working knowledge. The objective of the

study was to understand how knowledge functions within the workplace. The researchers

used the following methodology. Twenty-five companies participated in interviews and

discussions with the researchers. The researchers interviewed corporate managers

regarding how knowledge functions within their workplace. The corporate managers did

not know how to answer this question but to say they wanted *'insights'* such as how to

manage and create best practices, new ideas, and break through processes. From the data

collected and analyzed the researchers wrote the book *Working Knowledge: How*

organizations manage what they know and described the concept of working knowledge

in detail. The conclusions regarding knowledge transfer related to the present study

were: "transfer = transmission + absorption (and use)" (p. 101). "Knowledge transfer

involves two actions: transmission (sending or presenting knowledge to a potential

recipient) and absorption by that person or group" (p. 101). "The goal of knowledge

transfer is to improve an organization's ability to do things, and therefore increase its

value. Even transmission and absorption together have no useful value if the new

knowledge does not lead to some change in behavior, or the development of some new idea that leads to a new behavior" (p. 101). Davenport and Prusak also suggested knowledge transfer barriers included: lack of trust, pride, stubbornness, lack of time, lack of opportunity, fear of risk taking, and low self-esteem. These barriers were human qualities and suggested knowledge resides within the individual.

In addition to the barriers listed above, Herschel et al. (2001) previously summarized in this chapter, considered how structured or unstructured knowledge influenced knowledge transfer. Structured knowledge was knowledge expressed or recalled using a protocol. Unstructured knowledge was knowledge expressed or recalled freely without aids or protocol. The objective of their study was to examine whether a structured narrative protocol or a structured recall protocol enhanced a learner's understanding and articulation of a topic. The researchers used the following methodology. The study was experimental. The authors created two videos offering student counseling information. One video presented a rich structured narrative the other did not. Two hundred thirty-eight business students participated. Two groups formed. One group watched the structured video the other watched the free form video. One group expressed what they learned in a free form manner. The other group used a structured recall prototype to assist with recall and expression of what they learned. The researchers recorded and coded the data. Results were analyzed using statistical methods. The conclusion regarding knowledge transfer related to the present study was: The method of presentation of knowledge and recall of knowledge affected knowledge transfer.

The researcher of the present study believed there was a tacit quality to most of the literature reviewed thus far making understanding and transfer challenging. The next study may suggest why that was.

In a study of the transfer of expertise, Hinds et al. (2001) examined experts' level of abstraction related to conveying knowledge. The objective of the study was to understand the effect of expertise on knowledge transfer. The study used the following methodology. The study was experimental and conducted in two phases. In phase one the participants were 22 college students with majors in engineering and physics having varying level of experience in their respective field: beginner or expert. The researchers gave the participants instructions to build circuit boards. The researchers recorded and analyzed the participants' performance. In phase-two, experts from phase-one became familiar with the next task and then instructed junior and senior humanities students with no expertise in engineering or physics how to build a circuit. The researchers recorded and analyzed the number of concrete, abstract, basic and advanced statements the instructors offered their students. The conclusions related to the present study were: experts should be well-positioned to convey their knowledge yet they were not. The abstraction of their knowledge made it difficult for beginners and novices to understand. Beginners and novices required more concrete knowledge from experts for effective knowledge transfer.

What other objects, items, or concepts influenced knowledge transfer? In a study of knowledge transfer Kane et al. (2005) examined the effects of social identity and knowledge quality on knowledge transfer across groups. The objective of the study was to understand how personnel rotation affected knowledge transfer in groups. The

researchers defined knowledge transfer as, "the process by which one unit of an organization, such as a group or department is affected by the experience of another" (Argote & Ingram, 2000, p. 151). The study used the following methodology. The study was experimental. The participants were 144 college students from introductory business administration courses. The researchers randomly formed three-person groups. The groups worked on independent an independent production task. Midway through the task the authors rotated a member out of each group and into another group. The group then welcomed a new member. The authors recorded and analyzed the group's production to determine how the new member impacted the group's performance. The conclusions related to the present study were: groups were likely to adopt a method of the person rotated in when they brought along a superior method to the group's method of production. Groups were also likely to adopt the methods of the rotated-in person when they shared a superordinate social identity with that person and would not adopt that individual's practices when they did not. And, personnel rotation and social identity affected knowledge transfer within groups.

"Knowledge transfer in organizations is a social process. Coaching is a supportive, social activity" (Blow, 2005, p.15). In a study of the transmission of expertise Blow (2005), previously summarized in this chapter, examined coaching strategies and sharing expertise. The objective of the study was to understand if coaching strategies helped experts share expertise. The researcher used the following methodology. The study used a phenomenological approach for data collection and analysis. The researcher explored the experiences of 19 participants with the cross-section of seven experts, six coaches, and six coachees. Data collection was with semi-

structured interviews to determine if experienced people found it difficult to pass on their expertise. The conclusions regarding knowledge transfer related to the present study were: a coach may help experts express expert knowledge in ways others can grasp and then use. "The study has shown that not all experts find getting in touch with their own deep understanding easy, nor are they all sociable, or easy communicators. It would not seem unreasonable then to suggest that coaching strategies could indeed help some experts to think more clearly about their own intuitive knowing and unconscious competence" (p. 15). Once again, the abstraction of human knowledge challenged transfer.

How do groups or teams transfer what they know? In a study of knowledge transfer Newell et al. (2006) examined how project teams transferred knowledge and lessons learned to other like groups within the firm. The objective of the study was to understand why cross-project knowledge transfer fails. The study used the following methodology. The study was qualitative and explorative. The researchers selected six organizations across the UK across industries. Each organization was in business for at least 30 years and employed at least 50,000 people. The unit of analysis was the project. The study examined 13 projects. The researchers conducted 137 interviews with project managers and project team members and recorded the data. Results were analyzed using inductive analysis. The conclusions related to the present study were: capturing and sharing of process knowledge was more important than the capturing and sharing of product knowledge. Much of the knowledge captured was product knowledge (what was done) and considered useless; process knowledge (how it was done) was not captured. Also, "a common strategy to transfer knowledge from projects was for project teams to

capture 'lessons learned' and store these on a database for others to access. This strategy

is widely adopted but such databases are not widely used…cross project knowledge

transfer fails" (p. 167).

In a similar study, Foos et al. (2006), previously summarized in this chapter,

explored what influenced tacit knowledge transfer between two product development

partners. This explorative study used qualitative and quantitative methods. The authors

conducted 13 interviews with senior managers, middle managers, and project managers

from three companies working in external technology integration. An online survey

collected data from project managers of 39 technology integration projects across five

different companies. Results were analyzed using thematic and statistical analysis. The

conclusions regarding knowledge transfer related to the present study were: participants

had a poor understanding of the process, content, and meaning of tacit knowledge

transfer. The study did not explicitly define the term transfer, it implied exchange.

Finally, in a study of tacit knowledge, Janson and McQueen (2007), previously

summarized in this chapter, examined how leadership is learned. The purpose of the

study was to understand and capture leadership knowledge. The study employed a

qualitative design. The participants were leaders of varying degrees of experience in the

field of science and technology. Janson and McQueen interviewed and collected and

narratives from 31 leaders. Results were analyzed using thematic analysis. The

conclusions regarding knowledge transfer related to the present study were: a prospective

innovation leader does not easily transfer tacit knowledge into explicit 'how-to'

instructions, yet tacit knowledge was a major source of competitive advantage. Explicit

means of how-to instructions do not convey embodied tacit leadership knowledge. And,

leaders must build their individual knowledge base through experience, insight, and reflection.

Knowledge Transfer Section Summary

The studies reviewed in this section suggest the concept knowledge transfer is also quite abstract, not clearly defined, and suggests knowledge moves through individuals, groups, and organizations. This review also revealed a key insight for this researcher: knowledge transfer was a social process and required supporting social activities.

The review of Knowledge Sharing follows.

<div align="center">*Knowledge Sharing*</div>

Knowledge Sharing Shorthand Lists

Below are 17 studies the researcher examined regarding knowledge sharing. Each study contains only shorthand statements paraphrasing the important insights regarding knowledge sharing within that study. After the shorthand lists of the 17 studies a full description of each study follows in the section entitled Knowledge Sharing Contextual Narratives. The review begins below.

Nonaka (1994) relevant insights:

- Acquiring tacit knowledge requires sharing experiences.
- Mutual trust requires sharing experiences.
- Direct understanding requires sharing experiences.
- New knowledge requires sharing experiences.

Nonaka and Takeuchi (1995) relevant insights:

- Sharing is personal.
- Personal sharing requires a person-to-person and a face-to-face relationship.
- Shared experiences allow dwelling in the thinking processes of another.

Nonaka and Konno (1998) relevant insights:

- "Ba" is a space where shared experiences exist.
- Knowledge is embedded in Ba.

O'Dell and Grayson (1998) relevant insight:

- Pro-sharing cultures are social practices embedded in people, culture, and context.

Davenport and Prusak (2000) relevant insights:

- Sharing a common language increases understanding between individuals.
- A shared language enhances knowledge transfer.

Stenmark (2000) relevant insight:

- People do not share if not personally motivated to do so.

von Krogh et al. (2000) relevant insights:

- Sharing tacit knowledge is the first step in knowledge creation.
- Enablers for sharing tacit knowledge are conversation and creating the right context.
- Sharing tacit knowledge requires care.
- Sharing tacit knowledge requires an enabling context.

Bennett (2001) relevant insight:

- All four dimensions of "ba" impact sales force management.

Chua (2001) relevant insights:

- Sharing is a social interaction.
- Sharing requires matching knowledge to the appropriate communication medium or channel.
- Highly tacit knowledge requires person-to-person, face-to-face interaction.
- Highly explicit knowledge requires less personal interaction.

Herschel et al. (2001) relevant insight:

- Sharing is imparting personal feelings.

Huysman and de Wit (2002) relevant insights:

- Employees who's job it is to share:
  - knowledge coordinator and

- knowledge specialist.
- Sharing and/or knowledge acquisition is usually person to person.

Sveiby and Simons (2002) relevant insight:

- Be aware of barriers to knowledge sharing.

Tiwana (2002) relevant insights:

- Sharing knowledge grows knowledge.
- Organizations must manage enablers and impediments of knowledge sharing.

Chong (2003) relevant insights:

- Knowledge is social and personal.
- When people move on to other locations or projects, knowledge is lost and sharing stops.

Gichuru and Tobin (2004) relevant insight:

- Employee recruitment and employee retention impacts knowledge sharing.

Blow (2005) relevant insights:

- Experts have difficulty sharing because they work so intuitively.
- Sharing is social.
- Redefining words causes problems.

Peroune (2007) relevant insight:

- Sharing involves communication of knowledge, experience, and information among peers.

Knowledge Sharing Contextual Narratives

The following narratives summarize the 17 studies reviewed regarding knowledge

sharing. A summary appears at the end of this section. The review begins below.

Nonaka (1994) states, "the key to acquiring tacit knowledge is experience.

Without some form of shared experience, it is extremely difficult for people to share each

other's thinking processes" (p. 19). Nonaka goes on to say that shared experience is the

root of mutual trust, direct understanding, and new knowledge. Sharing experience, with

experience being the wellspring of tacit knowledge, enables indwelling, reflection, or internalization. From that point an individual creates new knowledge within and begins to share again.

In a study of organizational knowledge creation, Nonaka and Takeuchi (1995), previously summarized in this chapter. "The goal of this study was to formalize a generic model of organizational knowledge creation" (p.ix). The researchers employed a case study methodology. Twenty organizations participated. The researchers included Japanese and United States organizations. Data collection consisted of in-depth personal interviews with 130 corporate managers during the 1980's. The analysis constructed a new theory of organizational knowledge creation. The conclusions regarding knowledge sharing related to the present study were: both tacit-to-tacit knowledge sharing called socialization and tacit-to-explicit knowledge sharing called externalization exist. Individual successes, failures, and inspiration, moved knowledge beyond the individual and enlightened the group and then the organization. Sharing was personal and it was this personal interplay of person-to-person and face-to-face relationship that allowed one to go beyond the superficial and dwell in the thinking and processes of another – consciously or unconsciously. These segments of the knowledge creation model were of utmost importance, as knowledge begins and moves from and through individuals.

Another thought to consider was where does sharing take place? In a study of knowledge creation, Nonaka and Konno (1998) examined the fundamental conditions for knowledge creation. The objective of the study was to understand the where knowledge creation takes place. The study was an organizational case study across three major Japanese organizations exploring the transformation of 'Ba'- the phenomenal place for

knowledge creation. The framework for the study and analysis was the SECI model

within Nonaka and Takeuchi's (1995) theory of knowledge creation. The conclusions

related to the present study were: a key platform of knowledge creation is the

'phenomenal' place or shared space where knowledge can emerge. There was a space

where the interplay of shared experience exists. They called this space 'Ba.' There were

four types of Ba: Originating Ba (face-to-face), Interacting Ba (peer-to-peer), Cyber Ba

(group-to-group), and Exercising Ba (on-the-site). These spaces were physical, mental,

or virtual. Knowledge embedded itself in Ba or context.

Do individuals want to share? In a study of organizational knowledge transfer,

O'Dell and Grayson (1998), previously discussed in this chapter. The researchers used a

case study approach. The objective of the study was to understand organizational

knowledge transfer and create a model of organizational knowledge transfer of best

practices. The conclusions regarding knowledge sharing related to the present study

were: knowledge sharing was a part of knowledge transfer. People want to share their

knowledge. "People like to see their knowledge and expertise used… People want to

help their colleagues. People want to learn from others they trust and respect" (p. 75). A

pro-sharing culture included the following points:

- learning through teaching and sharing
- communal understanding through story telling
- continuous exchange…experimentation…
- common areas of interest and expertise
- common issues and problems; strong professional ethics
- personal relationships (p. 72)

The researchers considered these elements (listed above) social practices embedded in

people, culture, and context.

In a study of organizational knowledge, Davenport and Prusak (2000), previously summarized in this chapter, examined the facets of organizational knowledge with the objective of understanding and describing working knowledge within organizations. The researchers used the following methodology. Twenty-five companies participated in interviews and discussions with the researchers. The researchers interviewed corporate managers regarding how knowledge functioned within their workplace. The researchers recorded and analyzed all responses. The conclusions regarding knowledge sharing related to the present study were: the sharing of experiences were important in the realm of workplace knowledge. Sharing was an action or act. "A major factor in the success of any knowledge transfer project is the common language of the participants. Sharing almost identical training and experience, working in precisely the same specialized area…professionals…could readily understand one another's words and actions…a shared language is essential to productive knowledge transfer. Without it, individuals would not understand or trust one another" (p. 98).

The literature was building a case that sharing was important; consider the next comment regarding knowledge sharing. In a study of tacit knowledge, Stenmark (2000) explored turning tacit knowledge tangible within agent-based information and document retrieval systems. The objective of the study was to understand how tacit knowledge may become tangible within an organization setting. Eighty information technology professionals participated. All worked within the same firm. Data collection included individual and group interviews, on-line questionnaires, and a review of participant log files. A grounded theory approach guided the analysis. The conclusions regarding knowledge sharing related to the present study were: knowledge sharing was a personal

act. For example: "A weakness with Nonaka and Takeuchi's (1995) rather well-referenced model of knowledge creation and sharing is that it largely ignores the fact that knowledge is a competitive resource not only on the organizational level but also on an individual level. People do not share knowledge without a strong personal motivation and they would certainly not give it away without concern for what they may gain or lose in the process" (p. 7).

How do individuals share knowledge? In a study of utilizing organizational knowledge Von Krogh et al. (2000) examined how to enable knowledge creation. The objective of the study was to understand and describe how organizations generated and created innovation based upon the Nonaka and Takeuchi's (1995) theory of knowledge creation. The researchers conducted case studies of organizations considered leaders in innovative practices. The researchers collected data by interviewing corporate executives and managers and then analyzed the results. The conclusions related to the present study were: sharing tacit knowledge was the first step in knowledge creation. Good, deep conversations shared tacit knowledge. Good, deep conversations included mind/body experiences. Observation, imitation, experimentation and comparison, and joint execution enhanced sharing tacit knowledge during conversation. Being and doing with another person in a person-to-person, face-to-face environment was a requirement of knowledge sharing. This direct personal interaction constituted socialization. "Tacit knowledge is shared through deep socialization of project teams or what we call a micro-community of knowledge. Socialization means that members of the community not only come to understand each other's definitions of shared situations but also agree on a common definition and justified true belief about how to act in that situation" (p. 82).

In a study of Ba, the shared space for emerging relationships – physical, virtual, or mental – where knowledge sharing takes place, Bennett (2001) examined the roles of formal and informal social gatherings of salespeople and the exchange of knowledge. The study's objective was to understand whether a sample companies demonstrated the use of *ba* Nonaka and Takeuchi's (1995) model of knowledge conversion. The researcher used the following methodology. A survey of 470 sales directors from manufacturing firms in the UK produced 113 replies. The study used a statistical analysis of the data. The conclusions related to the present study were: all four types of ba (originating, interacting, cyber, and exercising) exerted a significant impact upon one or more of the dimensions of sales force management. A shared space for knowledge sharing existed according to this study.

Media or communication channels were a shared space for knowledge sharing. In a study of the relationships between the types of knowledge shared and the types of communication channels used, Chua (2001) examined the type of knowledge shared, the degree of explicitness or tacitness, and the communication used to share this knowledge. The researcher used the following methodology. The participants were from higher education. Twenty senior academic staff participated in focus groups. Fifty-one academic staff with curriculum development duties received questionnaires. The study used a ranking and statistical analysis of the data. The conclusions related to the present study were: sharing is a social interaction among individuals, groups, and organization members. The processes of knowledge sharing and knowledge creation depended upon social interaction for effectiveness. Two components related to social interaction were the types of knowledge shared and the communication channels used. Managers must

examine the types of knowledge concerned and determine the degree of explicitness and then determine the proper communication for sharing. For example, to share tacit knowledge such as intuition or hunches requires person-to-person face-to-face meetings whereas sharing knowledge with high degrees of explicitness requires less personal ways.

In a study of knowledge exchange, Herschel et al. (2001), previously discussed in this chapter, suggested a personal 'feeling' exists in knowledge sharing. The objective of their study was to examine whether a structured narrative protocol or a structured recall protocol enhanced a learner's understanding and articulation of a topic. The study used the following methodology. The study was experimental. The authors created two videos offering student counseling information. One video presented a rich structured narrative the other did not. Two hundred thirty-eight business students participated. Two groups formed. One group watched the structured video the other watched the free form video. One group expressed what they learned in a free form manner. The other group used a structured recall prototype to assist with recall and expression of what they learned. The researchers recorded and coded the data. Results were analyzed using statistical methods. The conclusion regarding knowledge sharing related to the present study were: sharing embodied knowledge such as a personal feeling required a structured protocol to enable both presenting and recall of the knowledge. For example, "The films used in this experiment represent the sharing of tacit knowledge via a rich narrative by the Director of Student Services. She is sharing her own experience and judgment - she is not reciting information that can readily be found in any procedures manual or student catalogue" (p. 110).

Huysman and de Wit (2002) studied organizational knowledge sharing. The objective of the study was to understand knowledge management initiatives. The study used case study methodology. Ten large organizations who were willing to share knowledge sharing procedures and practices participated. Data collection included conversations and written documentation from 50 individuals actively participating in knowledge management practices. Questions asked included: Whose knowledge is shared? What knowledge is shared? Why is knowledge shared? When is knowledge shared? How is knowledge shared? Where is knowledge shared? The results were analyzed using descriptive analysis. The conclusions related to the present study were: knowledge sharing depended upon knowledge flow within three positions inside the companies. A Knowledge Coordinator was responsible for keeping knowledge current and generating and distributing new knowledge. A Knowledge Specialist was a 'walking encyclopedia' of specialized knowledge supporting a team and the Knowledge Coordinator. The third position was the Knowledge Contact Person. This position focuses upon and supports a specific group of processes and products within a team assisting the team and the team leader. These positions along with a knowledge database insured the upkeep, generation, and flow of knowledge, when all were in harmony.

Are there barriers to knowledge sharing? In a study of organizational knowledge, Sveiby and Simons (2002) examined factors influencing effectiveness of knowledge work. The study's objective was to understand what makes some knowledge transfer processes more effective than others in creating value within the organization. The researchers used the following methodology. The participants were organizations world-wide. The researchers used a survey to collect data. The researchers gave private

companies and public companies access to a survey questionnaire for a three year period. Respondents were primarily Australian, North American, Canadian, Asian and Scandinavian. The researchers collected 8277 responses. The study used a statistical analysis of the data. The conclusions related to the present study were: the following were barriers to knowledge sharing: lost customer relations, no systems for customer support and access, no system to transfer tacitly held expertise, lack of tools training, reinventing the wheel, job security, internal trading, lack of recognition, learning not positive for career, and lack of professional support.

How would an organization manage knowledge sharing? In a study of organizational knowledge management and resulting book, Tiwana (2002), previously summarized in this chapter does not discuss his methodology other than to say it is from lesson learned from past research. The researcher defined knowledge sharing as a process disseminating and making available what is already known. "Knowledge is one of the few resources that demonstrates increasing returns of scale. The more you share it, the more it grows." (p. 59). "Knowing, capturing, and sharing a component of knowledge can make all the difference between complete and incomplete, unactionable knowledge" (p. 47). The conclusions regarding knowledge sharing related to the present study were: enablers and impediments existed. The following constructs were enablers of knowledge sharing:

- high level of trust
- rewards for sharing
- team-based collaborative work
- aligned mission, vision, values, strategy
- joint team-wide accountability/reward
- process
- focus on customer satisfaction
- open to outside ideas

- eye on competition
- collaborative cross-functional work
- need to share
- localized decision making
- group accountability/rewards (p. 60).

The flowing constructs were impediments to knowledge sharing:

- fear and suspicion
- unintentionally rewarding for hoarding
- individual effort no recognition reward
- individual accountability and reward
- functional focus
- lack of alignment
- not-invented here syndrome
- too busy to share
- internal competition
- incompatible IT
- compartmentalized of functional groups
- centralized top-down decision-making
- employee-owner interest conflict (p. 60).

Tiwana suggested organizations must manage the enablers and impediments of

knowledge sharing for the effective use of knowledge.

Within another industry in a study of knowledge management, Chong (2003)

investigated how knowledge sharing occurs in architectural practices. The study had four

objectives. "(1) to understand the implications of knowledge management in a project

based environment; (2) to understand knowledge management in a multi-profession

environment; (3) to explore the challenges of knowledge management of the firm; and (4)

explore social relationships in the management of knowledge" (p. 5). The researcher

used the following methodology. The study was an interpretative single case study. The

firm was the unit of analysis. The firm was an architectural firm based in London,

England. The researcher collected data by semi-structured interviews of seven

informants. The informants were directors, project coordinators, and architects. Results

were analyzed using qualitative analysis. The conclusions related to the present study were: knowledge was personal and social. When project teams disbanded knowledge was lost. Due to the tacitness and mobility of knowledge, when people moved on, sharing stopped, and knowledge was no longer available or even recognized. Where people go, so went their knowledge.

Embracing and increasing the enablers of knowledge sharing while at the same time decreasing the impediments of knowledge sharing appears as a logical strategy. However, the challenge in workplace knowledge was once again tacit knowledge. Consider the next two studies regarding knowledge sharing and tacit knowledge.

In a study of tacit knowledge diffusion, Gichuru and Tobin (2004), previously summarized in this chapter, examined the sharing and diffusion of tacit knowledge at Eli Lilly SA an international pharmaceutical firm. The objective of the study was to identify the challenges of tacit knowledge diffusion and rank them in order of importance. The study used a case study methodology. The site selected was a global company. The researchers collected data with a self-administered survey questionnaire sent to all employees. Results were analyzed using comparison and statistical ranking methods. The conclusions regarding knowledge sharing related to this study were: highly valuable tacit knowledge was highly mobile. Tacit knowledge was difficult to diffuse within the organization. Knowledge only remained when talented employees remained. Recruitment and attraction brought knowledge aboard with new talented people. Behaviors and actions such as joining, staying, and leaving an organization challenged the ability of an organization to capture and share what an individual employee knows.

Sharing knowledge was challenging. Blow (2005), previously summarized in this chapter, examined coaching strategies as a way to help experts share what they know. The objective of the study was to understand if coaching strategies help experts share expertise. The methodology follows. The study used a phenomenological approach for data collection and analysis. The researcher explored the experiences of 19 participants with the cross-section of seven experts, six coaches, and six coachees. Data collection was with semi-structured interviews to determine if experienced people found it difficult to pass on their expertise. The conclusions regarding knowledge sharing related to the present study were: many experts found sharing expertise difficult. An expert's work was so intuitive he or she may not be aware of all of the details behind a particular action or awareness. Experts may work alone and since sharing was a social activity, the lack of person-to-person interaction limited knowledge sharing. And, experts frequently re-defined words causing difficulty in common understanding across colleagues.

Perhaps the following quote can put knowledge sharing in perspective. In a study of tacit knowledge, Peroune (2007), previously summarized in this chapter, examined the relationship of peer relationships and tacit knowledge. The objective of the study was to understand the role one's peers had in making tacit knowledge explicit. The methodology follows. The study used a case study methodology. The site was a small printing firm. Five individuals working in that firm participated. Data was collected using semi-structured interviews. Results were analyzed using thematic analysis. The conclusion of this study regarding knowledge sharing related to the present study was: knowledge sharing is something that people do with other people, possibly all day, possibly every day. "Sharing knowledge. Sharing information. Sharing the experience

that you just went through with a particular job. For peers who work together on a day-to-day basis such as Warren and Preston do, the communication is constant and automatic" (p. 252).

Knowledge Sharing Section Summary

This section presented a review of the literature regarding knowledge sharing relevant to this particular study. The most important insights revealed within this section were the notions of knowledge sharing was a social process or social activity, and occurred within a shared space. To this researcher, the person-to-person relationship deserves attention during this study.

The final section, Knowledge Creation, follows.

Knowledge Creation

Knowledge Creation Shorthand Lists

Below are 10 studies the researcher examined regarding knowledge creation. Each study contains only shorthand statements paraphrasing the important insights regarding knowledge creation within that study. After the shorthand lists of the 10 studies a full summary of each study follows in the section entitled Knowledge Creation Contextual Narratives. The review begins below.

Nonaka and Takeuchi (1995) relevant insights:

- The Theory of Organizational Knowledge Creation contains the SECI model.
- The SECI model refers to the four modes of knowledge conversion within knowledge creation.

Bhatt (2001) relevant insights:

- Learn-reflect and unlearn-relearn is another model of knowledge creation.
- Conversion of information-to-knowledge depends upon interpretations of people.

Engeström, Miettinen, and Punamäki (1999) relevant insight:

- The SECI model is best used to analyze different types of knowledge representation.

Snowden (2002) relevant insights:

- Although the SECI model is widely accepted, the model is problematic.
- The SECI model is not supported by sufficient empirical evidence.

Tsoukas (2002) relevant insights:

- Tacit knowledge is misunderstood in management studies.
- Tacit knowledge is unspeakable.
- Tacit knowledge can not be captured, translated, or converted.
- Tacit knowledge is manifested in what we do.
- The concept of tacit knowledge within the SECI model is problematic.

Glisby and Holden (2003) relevant insights:

- Cross-cultural considerations of the SECI model need further examination.
- Knowledge sharing is not embedded in all cultures.
- The SECI model is broadly accepted regardless of cultural considerations.

Hoe (2006) relevant insights:

- The SECI model is a social process.
- Informal knowledge is linked to socialization and externalization.
- Tacit and explicit knowledge are complimentary not separate.
- Structured knowledge sharing is externalization and combination.
- Unstructured knowledge sharing is socialization and internalization.
- Tacit and explicit knowledge are the two sides of the same coin.
- New knowledge comes about by praxis not by conversion of tacit to explicit conversion.

Lin and Wu (2007) relevant insight:

- The SECI model integrates with ISO 9001:2000.
- The SECI model with ISO 9001:2000 creates organizational competitive advantage and new organizational knowledge.

Nonaka and von Krogh (2009) relevant insights:

- The discussion regarding knowledge creation and knowledge conversion continues.
- Tacit and Explicit knowledge move along a continuum.
- Tacit knowledge is still recognized as an implied rule-of-thumb.
- Research opportunities within knowledge creation/conversion are plentiful.

Knowledge Creation Contextual Narratives

The following narratives summarize the 17 studies reviewed regarding knowledge creation. A summary appears at the end of this section. The review begins below.

This final section presents a summary of the salient points regarding knowledge creation within the reviewed literature, specifically regarding the SECI model of Nonaka and Takeuchi (1995). This section includes both theoretical and empirical works.

In the review of literature, the most noted model of knowledge creation was Nonaka and Takeuchi's (1995) SECI model, previously summarized in this chapter, the SECI model proposed four modes of conversion of tacit-to-explicit-to-tacit knowledge generating knowledge creation. A more complete description of this model is within Chapter One as this study's theoretical framework. This model was widely cited with adopted widespread application and popularity (Glisby & Holden, 2003) and has become even considered paradigmatic (Snowdon, 2002). Engeström et al. (1999) pointed out an interesting notion. "Nonaka and Takeuchi's categories may themselves be used productively to analyze different types of knowledge representation that are employed in the course of collaborative knowledge creation" (p. 380). Yet concerns about this theory of knowledge creation existed in the literature.

For example, one concern regarding Nonaka and Takeuchi's (1995) Theory of Organizational Knowledge Creation came from Snowden (2002). Snowden suggested the SECI model, which was widely cited across diverse disciplines by many authors, did not have sufficient empirical support. He also suggested some of the conversion modes were not coherent.

Also, Tsoukas (2002) suggested that Nonaka and Takeuchi's Theory of Organizational Knowledge Creation was flawed. Tsoukas believed the problem was how Nonaka and Takeuchi represent tacit knowledge within their theory and model. If tacit knowledge was indeed unspeakable it resisted capture, transfer, or conversion. Tacit knowledge could only reveal its presence in what we do.

A final example of concern, Glisby and Holden (2003) stated the knowledge creation theory of Nonaka and Takeuchi (1995) was flawed, "Judging by the widespread application and popularity of the model, Nonaka's (1994) and Nonaka and Takeuchi's (1995) repeated claims of universal validity seemed to have been implicitly acknowledged by the knowledge management community" (p. 29). Glisby and Holden argued the cross-cultural considerations of the model needed serious consideration. The Theory of Knowledge Creation was about Japanese companies and the Japanese culture. Glisby and Holden suggested applying this model to other cultures was problematic. They go on to say the Japanese culture embedded knowledge sharing within itself and the Western cultures did not. They concluded the theory and the model were useful providing one was aware of the cultural perspective regarding Nonaka and Takeuchi's work.

However, with the above criticisms in mind Nonaka and Takeuchi's (1995) Theory of Organizational Knowledge Creation and its SECI model appeared to be a viable framework to explore and expand upon. The following two studies pointed to a direction seeking more understanding of how to implement the SECI model universally across social processes, cultures, genders, and organizational processes.

In a review of the literature regarding organizational knowledge, Hoe (2006) examined informal knowledge. The objective of the researcher's study was to better understand informal knowledge processes. The study methodology was a literature review of structural and informal organizational knowledge. The conclusions related to the present study were: the SECI model was a social process. Two of the key processes within this model, socialization and externalization, linked to the processes of informal knowledge suggesting tacit and explicit knowledge were not separate but complimentary to each other. Informal knowledge processes were the spontaneous and voluntary ways of collecting and sharing knowledge rather than imposed structured methods created by the organization. The structured methods of knowledge sharing reflected externalization and combination while the informal methods reflected socialization and internalization.

In a study of organizational innovation, Lin and Wu (2007) examine the integration of the SECI model with an ISO 9001:2000 continuous improvement process. The objective of the study was to create and understand a viable ISO 9001 based knowledge creation system framework. The study's methodology follows. The researchers followed a case study approach. The unit of analysis was the organization. The organization was an ISO certified Taiwanese firm involved in machine design and machine manufacturing. The researchers collected data using in-depth interviews, observation, and informal conversations. Twelve managers participated. The researchers recorded all data. Content analysis of the data followed. The conclusions to the present study were: the integration of the SECI model with an ISO 9001:2000 continuous improvement process was possible. This process created new organizational knowledge

and enhanced competitive advantage. Organizations may easily implement this framework.

More recently, Nonaka and von Krogh (2009) continued the discussion of knowledge creation and knowledge conversion with a synthesis of the theory building and research related to knowledge creation. The conclusions related to the present study were: researchers considered rules-of-thumb were still a representation of tacit knowledge and fifteen years of research in the area of knowledge creation, conversion, and sharing represented a short time. The article concluded, "as seen, the research opportunities are vast. We welcome your participation" (p. 649).

Knowledge Creation Section Summary

When the literature speaks of knowledge creation, in most instances it referred to Nonaka and Takeuchi's (1995) Theory of Organizational Knowledge Creation. The SECI model within their theory presents the most interest. In recent years, studies appeared discussing the application of the SECI model. The literature implied a continuing interest in workplace knowledge creation and knowledge conversion for years to come.

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Summary and Conclusion

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Chapter Two presented a review of literature relevant to this study. The topics included rules-of-thumb, tacit or explicit knowledge, knowledge transfer, knowledge sharing, and knowledge creation. The format for discussing each topic include a listing

of shorthand statements and then supporting contextual narratives allowing a double dip into this potentially abstract literature.

Chapter Three, the methodology is next.

CHAPTER 3

Methodology

Chapter Three presents the research methodology employed in this study. This

chapter presents 30 topics that offer thoughts, outcomes, and experiences occurring in

this study. The topics relate to the methodology of this study. Each topic presents the

researcher's rule of thumb (RRT) developed from the utilization of suggestions and

thoughts of experts in the field and also from the outcomes and experiences directly

related to this study. The chapter follows the path of topics listed below:

- The Research Purpose and Design
- The Problem
- The Phenomenon of Study and Research Question
- Unit of Analysis
- The Rationale for Using Qualitative Research
- The Rationale for Using Case Study with a Phenomenological Approach
- The Research Schedule/Agenda for this project
- Prepare to Collect Data
- Approvals
- Locate site
- Gain Access
- Sampling
- Sample Size
- Bracket
- Collect Data
- Observation
- Interview
- Recording Information and Storing Data
- Resolving Field Issues
- Analyze Data
- Data Managing
- Reading and Memoing
- Describe the Phenomenon
- Classify
- Qualitative Data Analysis Software
- Interpret
- Represent
- Quality of Study
- Methodological Limitations
- Pilot Study

The Research Purpose and Design

RRT-17   The research process begins with a research purpose and a plan that
           supports that research purpose.

         The purpose of this study was to develop better understanding of the experience

using of rules-of-thumb when sharing knowledge person-to-person. The insights added

depth to the current research about workplace knowledge, particularly the experience of

using rules-of-thumb when sharing knowledge.

         This study was a qualitative study. It was an exploration, description, and

interpretation of a phenomenon. The study was emergent in nature and had the potential

to dynamically move about as the data drove the researcher into unexpected areas.

The Problem

RRT-18   Research needs a problem to study. Know a research problem is both
           scholarly (can empirical work expand our thinking and knowing) and
           practical (how can we make life better).

         Knowledge stored in the heads of people, built from trial and error of experiences

over time, with both tacit and explicit dimensions, is valuable and essential to any

organization however the tacit component is difficult to capture and share (Nonaka &

Takeuchi, 1995; Davenport & Prusak, 2000; Tiwana, 2002; Haldin-Herragard, 2003; and

Leonard & Swap, 2005). How do we study this abstract tacit-explicit knowledge

component that is difficult to capture and share? The first challenge was to

operationalize the phenomenon to study it. It was necessary to capture the phenomenon

of study, rules-of-thumb, while in use by an individual. The second challenge occurred

due to the need to isolate the type of use for study. The study focused only upon rules-of-

thumb used when sharing personal knowledge. The researcher considered the following thoughts as starting points for the study.

Tiwana (2002) suggests that, "…it is the subconscious repertoire of scripts and rules-of-thumb that make experienced managers more valuable than new hires." (p. 47). He goes on to say, "Tacit knowledge, however complex to understand and manage, holds the promise for long-lasting impact if we can successfully tap into even a fraction of what is available" (p. 47). Yet, rules-of-thumb are epitomes of tacit knowledge (Haldin-Herragard, 2003) and therefore may represent difficulty in fully articulating the insights and direct experiences that shape the rule. There lies the challenge for study as well as the potential for unknown rewards from a deeper understanding of this phenomenon. This study expanded what was known about rules-of-thumb when sharing knowledge academically and practically.

The Phenomenon of Study and Research Question

RRT-19   The phenomenon of study and research question should inspire, motivate, and sustain the researcher as he or she dwells within it for what can seem to be an eternity.

This study explored the experience of using rules-of-thumb of a Technical Coach (TC) when sharing personal knowledge. The objective was to explore, describe, and interpret the experience from the perspective of the TC. This was a qualitative study seeking a deeper understanding of the experience of using rules-of-thumb when sharing personal knowledge.

The primary research question was: What is the experience of using rules-of-thumb like for a Technical Coach when sharing personal knowledge?

Unit of Analysis

RRT-20   Clearly know what or who you are exploring before you enter the study and begin collecting data.

The unit of analysis was the individual. The phenomenological design sought the experiences and perceptions of the individual (van Manen, 1990). The guiding theoretical framework was the SECI model found within the Theory of Organizational Knowledge Creation by Nonaka and Takeuchi (1995) suggesting the following. Knowledge begins within the individual. Knowledge is embedded within the individual. Knowledge comes from past and present experiences. Knowledge moves through the individual outward to groups and to the organization. It was the individual that became the unit of analysis of this study.

This study explored the individual's experiences and perceptions with the phenomenon. Within this study the unit of analysis was the individual TC. The researcher observed, interviewed, and had follow-up conversations with the individual to understand his or her experiences with the phenomenon of interest.

The Rationale for Using Qualitative Research

RRT-21   If one seeks to explore a human experience, one shares the experience with a participant in the natural setting where it occurs. Be flexible as life is flexible.

Qualitative research seeks to draw from a participant's experience in their natural settings to deeply understand a phenomenon in the social world and to create new meanings from this inquiry (Rossman & Rallis, 2003). Creswell (1998) suggested, "Qualitative research is an inquiry process of understanding based upon distinct

methodological traditions of inquiry that explore a social or human problem. The

researcher builds a complex, holistic picture, analyzes words, reports detailed views of

informants, and conducts the study in a natural setting" (p. 15). A qualitative design was

appropriate for this study's purpose, to gain a deeper understanding of a phenomenon –

rules-of-thumb when used to share knowledge. The study was in the natural setting of

the participants where it explored the meanings and understandings of the phenomenon.

The product of this study was a report listing rules-of-thumb collected, descriptions and

interpretations from the participants about their experiences regarding rules-of-thumb

when sharing knowledge, and the interpretation and presentation of the researcher's

rules-of-thumb from this experience.

The Rationale for Using Case Study with a Phenomenological Approach

RRT-22   Choose a research approach that addresses your questions, concerns, and
           resources.

"Case studies are a common way to do qualitative inquiry. Case study research is

neither new nor essentially qualitative. Case study is not a methodological choice, but a

choice of what is to be studied" (Stake, 2008, p. 119). The focus of study was the

individual's experience, performing a particular task, within a specific job description,

within a particular organization. Utilizing the suggestions of Stake (1995) and Yin

(2003) this study was an instrumental embedded case study bounded within a single

system, the organization. Continuing this line of thinking, this study thus entered a single

organization, a customer service operations center. Within this organization was a

particular job, a TC, in which the individuals within this role shared what they knew with

a team for the purpose of providing customer service and processing customer

information. These individuals according to Stake (1995) and Yin (2003) became

individual embedded cases that were instrumental to exploring the experience of using

rules-of-thumb when sharing personal knowledge, the focus of this study. Therefore the

case study method framed this inquiry.

According to Moustakas (1994), a phenomenological study is about the meaning

and experiences of participants as they lived through a particular phenomenon. That

statement described the reasoning behind selecting a phenomenological approach within

this case study. This study was about the lived experience of a TC as he or she used

rules-of-thumb when sharing his or her personal knowledge within the natural

environment of the workplace working as a TC. This study was about exploring,

describing, and interpreting a particular lived experience, hence the phenomenological

approach.

'Meaning' questions (as in this study) seek to understand deeper levels of the

phenomenon and do not seek to solve problems (van Manen, 1990). This study consisted

of a phenomenological design seeking meaning and a deeper understanding of the

particular phenomenon. The researcher entered the field with a philosophical and

conceptual framework informing what he studied and how he conducted the study. This

study did not seek to solve subtle problems. It sought to understand the experience of

using rules-of-thumb when sharing knowledge – from the experiences of individuals.

The Research Schedule / Agenda for this Project

RRT-23   Develop a plan for collecting data and analyzing data. Follow that plan but
           be flexible.

Prepare to Collect Data

RRT-24   Build upon the guidelines of experts.

This study followed the 21 general suggestions from experts for a field research project. These 21 elements were a synthesis of a field research schedule suggested by van Manen, (1990); Moustakas (1994); Creswell (1998); Stake (2008); and Rossman and Rallis (2003). The suggestions below list the activity and the experts who influenced the researcher regarding the conduct of this study.

The list below may appear linear, step by step, however, it is not a linear checklist. The list provided the researcher with an awareness of the elements found within of a typical qualitative research study. Qualitative research is emergent and this researcher's plan adjusted as it progressed through the study. The researcher engaged and re-engaged numerous times in either consideration or action regarding these elements. A researcher must be flexible to changes while remaining focused on the project. To remind the reader of the non-linear flow of this plan the researcher added an additional suggestion for consideration at the end of the list.

After the list, appears a full summary of each suggestion.

- Prepare to collect data – create a field research schedule (Creswell, 1998; Moustakas, 1994; Stake, 2008; van Manen, 1990).

- Approvals – before collecting data gather all necessary approvals for the institution, the site, the participants, and any other individual or agency involved (Creswell, 1998; Moustakas, 1994; Stake, 2008; van Manen, 1990).

- Locate site – the site should offer access to data beneficial to the particular study (Creswell, 1998; Moustakas, 1994; Seidman, 1998; Stake, 1995).

- Gain access – the study must be do-able and access to the site and participants is of critical importance (Rossman & Rallis, 2003).

- Sampling – the researcher utilized purposeful criterion sampling. The participants must have experienced the phenomenon being explored (Creswell, 1998; Moustakas, 1994; van Manen, 1990).

- Sample size – up to ten individuals participating in in-depth interviews provide sufficient data (Creswell, 1998; Moustakas, 1994).

- Bracket – conduct the practice of bracketing or suspending one's beliefs of the natural world to better understand the essence of the phenomenon of inquiry (Moustakas, 1994; van Manen, 1990).

- Collect data –use conversational interviews and close observation as data collection methods (van Manen, 1990).

- Close observation – a way to gather peoples' experiences (van Manen, 1990).

- Interview – use the phenomenological three-stage in-depth interview method of Seidman (1998).

- Record and store data – two essential processes of a study are recording data and storing data (Creswell, 1998).

- Resolve field issues – prepare for field issues before entering the field (Creswell, 1998; Moustakas, 1994).

- Analyze data – understand and present the data (Creswell, 1998; van Manen, 1990).

- Data managing – develop a protocol to manage data (Creswell, 1998).

- Reading and memoing – plan on dwelling in the data (Creswell, 1998; Seidman, 1998; van Manen, 1990).

- Describe the phenomenon – a time comes for the researcher to describe the meaning of the experience, the case, and the context (Creswell, 1998).

- Classify – discover and group meaningful statements (Creswell, 1998; van Manen, 1990).

- Qualitative data analysis software – use a potential tool to group, sort, classify, and play with the data (Creswell, 1998; Seidman, 1998).

- Interpret – develop a description of the experience (Creswell, 1998; Moustakas, 1994; van Manen, 1990; Wolcott, 1994).

- Represent – write the report; tell the participants' story (Creswell, 1998; Moustakas, 1994; van Manen, 1990; Wolcott, 1994).

- Non-linear design – A researcher should consider the 20 suggestions listed above as many times as necessary and in the order most appropriate for the researcher's needs and intentions during the course of the study. The researcher of the current study addressed these items many times throughout this study adjusting his plan and being flexible to the study's focus, needs, and emergent insights.

With regard to preparing to collect data for this qualitative research study, the researcher used the above suggestions as a guideline. More details appear below.

Approvals

RRT-25   Address formal guidelines and requirements. Respect the wishes of the host and of the participants. Do no harm to any and all involved.

Before collecting data gather all necessary approvals for the institution, the site, the participants, and any other individual or agency involved (Creswell, 1998; Moustakas, 1994; van Manen, 1990; Stake, 2008).

The Pennsylvania State University Institutional Review Board granted formal approval for this research study. The researcher then collected all necessary approvals and consent. Upon selection of a site, the researcher met with site officials approving the research project within their location. The researcher then met with, explained, and obtained the informed consent of the participants to partake of the research project.

Locate Site

RRT-26   Let your research problem, research question(s), and resources (time, money, knowledge, skill, ability, and attitude, etc) guide your choice of site.

The site should offer access to data beneficial to the particular study (Creswell, 1998; Moustakas, 1994; Seidman, 1998; Stake, 1995). The researcher had contacts within

customer service industry. The participants sought by the researcher for this study were subject matter experts who used rules-of-thumb to share their knowledge with those in need as suggested by Leonard and Swap (2005) and from the researcher's personal experiences. The researcher also knew subject matter experts in customer service industries were responsible for supporting a team by sharing their knowledge. The researcher located a site where such individuals worked. The company allowed the researcher to conduct an on-site study.

Gain Access

RRT-27   Locate participants who are willing and able to participate, have the time to participate, offer easy access for follow-up, and give you the permission to record and publish the study.

A study must be do-able and access to the site and participants is of critical importance (Rossman & Rallis, 2003). Upon locating a potential site with potential participants and open access, criteria guided the researcher to the correct participants. "Essential criteria include: the research participant has experienced the phenomenon, is intensely interested in understanding its nature and meanings, is willing to participate in a lengthy interview (and perhaps a follow-up interview), grants the investigator the right to tape-record, possibly videotape the interview, and publish the data in a dissertation and other publications" (Moustakas, 1994, p. 107). As Creswell (1998) suggests, "Because of the in-depth nature of extensive and multiple interviews with participants, it is convenient for the researcher to obtain people who are easily accessible" (p. 117).

Knowledge Coaches also known as technical coaches were the participants for this study. The researcher selected this target population for two reasons. First, from

prior experience the researcher knew these individuals were subject matter experts and conveyed their know-how to a novice with the intention to accomplish a task. Second, knowledge coaches / technical coaches used and experienced rules-of-thumb implicitly and explicitly.

Sampling

RRT-28   Know how to determine who will participate in your study.

The researcher utilized purposeful criterion sampling. As stated earlier, the participants must have experienced the phenomenon being explored (Creswell, 1998; Moustakas, 1994; van Manen, 1990). Creswell stresses the participants must be able to articulate their experiences. Moustakas suggests the participants are co-researchers who are interested in studying the phenomenon, as well as having their statements audio-recorded. Van Manen (1990) adds that a participant must be willing and able to discuss in detail their personal life stories.

Using the criteria mentioned, the researcher selected participants who had experienced the phenomenon of interest, could articulate his or her experience, were willing to have their statements audio recorded and included within a published doctoral dissertation, and provided the time necessary to share their personal life stories.

As mentioned above the researcher's intent was selecting individuals who shared their knowledge with others as part of their job requirements and had experienced using rules-of-thumb. Within the selected organization such individuals existed. The researcher selected the individuals first for their role, sharing knowledge to support a team and second, because they had experienced using rules-of-thumb doing the work they do. The

study refers to the participants as technical coaches (TC) due to the nature of their work with computers, communication devices, software, data bases, and other like technologies used while supporting a team to provide customer service.

The researcher did not consider years of work experience, gender, education, or any other factors other than the present work requirement of sharing personal knowledge and experience and also using rules-of-thumb; future studies may consider these and other factors. The researcher selected this study's participants on the merits of their work requirements of sharing workplace knowledge to support a team to accomplish a required task and also having the experience of using rules-of-thumb within their work.

Within the available organization were individuals who met these criteria. The individuals were responsible to share their personal knowledge to supporting their team, in this case, to provide customer service. These individuals experienced using rules-of-thumb within their job and were willing to share their experiences with the researcher.

Sample Size

RRT-29   How many participants does the study require? How many can one handle?
          What is too many or too few?

Up to ten individuals (Creswell, 1998; & Moustakas, 1994) participating in in-depth interviews provide sufficient data. The study gave serious consideration to the access of these individuals. Access included time, ability, motivation, and desire to participate. As suggested by Creswell and Moustakas, a sample size of this number also provides a sensible number of participants to engage with when considering logistics, resources, and personal ability.

The original number of participants desired for the study was 10, with 2 for the

pilot study and 8 for the full study. In total 12 individuals volunteered to participate in

the study. After completing the pilot study the researcher met with the other 10 people,

determined they also met the criteria of the study and included all 10. The study

consisted of 12 individuals with 2 in the pilot phase and 10 in the full phase. All 12

individuals who volunteered participated in the study. The researcher excluded no

individual who volunteered.

Bracket

RRT-30   State your bias upfront and then continue with childlike wonder and
               curiosity to explore, describe, and interpret your intended phenomenon of
               study.

Van Manen (1990) and Moustakas (1994) suggest the practice of bracketing or

suspending one's beliefs of the natural world to better understand the essence of the

phenomenon of inquiry. In this study, the researcher sensitized himself to what the

literature said about rules-of-thumb and sharing knowledge but then went beyond the

explicit statements, theories, and suggestions of others. The researcher stated his bias and

experiences earlier in this paper. Within this study the researcher did not know the

participants, their stories, or their experiences and entered the study with great curiosity

and inquisitiveness along with a strong orientation to the phenomenon of study – the

experience of using rules of thumb when sharing personal knowledge. Each encounter

with the participant led the researcher deeper into the experiences of using rules-of-thumb

when sharing knowledge. During the pilot study, the researcher realized in exploring the

experience of a TC using a rule-of-thumb when sharing his or her personal knowledge,

the researcher became aware of the notion the TC was giving him the knowledge of how

to be a TC with the particular individuals upon the team. This awareness emerged

unexpectedly yet as the following sections of this document reveal, provided a profound

experience for the researcher and the outcome of this study. A common statement

resounded in the head of the researcher, "What is going on here?" That statement came

from his experience of coursework, literature reviewed, and personal curiosity. But truth

be told, suspending one's belief was not an easy task or always do-able.

Collect Data

RRT-31   Match the data collection tool or tools with the participants involved.

Van Manen (1990) suggests the use of conversational interviews and close

observation as data collection methods. He states, "We gather other people's experiences

because they allow us to become more experienced ourselves" (p. 62). With that in mind

van Manen offers up two methods of collecting or gathering human experiences that fit

well with the purpose of this study, conversational interviews and close observation.

Regarding the conversational interview, van Manen states, "…the interview serves very

specific purposes: (1) it may be used as a means for exploring and gathering experiential

narrative material that may serve as a resource for developing a richer and deeper

understanding of a human phenomenon, and (2) the interview may be used as a vehicle to

develop a conversational relationship with a partner (interviewee) about the meaning of

an experience" (p. 66). He goes on to say, "So another way of collecting accounts of

personal experiences is to have taped (or otherwise recorded) conversations with people

who might tell us *personal life stories* (anecdotes, stories, experiences, incidents, etc.) (p.

67). The researcher used the interview as a vehicle to develop a conversational relationship with the TC about the meaning of an experience. Close observation of the TC when working provided the researcher experiences for discussion.

Van Manen (1990) suggests, "the human science researcher tries to enter the life world of the persons whose experiences are relevant study material for his or her research project. The best way to enter a person's life world is to participate in it" and "be a participant and an observer at the same time" (p. 69).

Following those suggestions the researcher closely observed each participant for an agreed upon four hours while the participant worked as a TC. The researcher "shadowed" the TC. It was during the close observation within the pilot study the researcher realized the TC was (1) sharing his or her knowledge with team members to accomplish a task, (2) revealing a pattern of how to 'read and relate' to a team members, and (3) implicitly sharing his or her rules-of-thumb with the researcher on how to work as a TC with the various team members and in general practice. The researcher noted the encounters with the TC and team members for discussion during the interview phase with the TC.

Close Observation

RRT-32   Let your research problem and research question guide what you are
           observing and how you are observing. Remain flexible and open to change.

The observation process gathered experiences to discuss during the in-depth interviews. The observations gathered what the researcher determined to be TC rules-of-thumb in action. Close observation is an indirect method of gathering experiences (Van Manen, 1990). The relevant literature reviewed sensitized the researcher to examples of

what rules-of-thumb appeared as implicitly or explicitly. It was during the observation, Polanyi's (1964) statement, "we know more than we can tell" (p. 4) became apparent to the researcher. The moments and experiences noted for discussion with the TC contained rules-of-thumb, yet the researcher could not readily describe why he selected each moment or happening. Beyond the researcher's review of the literature regarding rules-of-thumb and his personal experiences with rules-of-thumb the researcher could only say, upon reflection, some type of 'inner knowing' urged him to record a moment for future discussion. Those moments provided the researcher with examples producing rich thick narratives when discussed in the interview phase.

The researcher closely observed each TC for four hours providing a total of 48 hours of observation during the study. The TCs and researcher scheduled mutually agreed upon dates and times for the periods of observation. The researcher conducted all observations before interviewing the participants.

The TC worked with a team situated in several rows of office cubicles. The space afforded room for the TC and the team member and not much more. The TC and researcher would go to a team member's cube either when hailed by that person or just to stop by and to check how the work flow was progressing. The researcher spent 48 hours directly walking with TCs through the aisles and into the team members' cubicles as the TC interacted with team members. The setting was the natural environment of the TCs' workplace.

During the observation the researcher followed a suggested protocol located in Appendix C of this document. More discussion of the use of the protocol follows in the paragraphs below. However, the researcher noted during the pilot study the observation

period provided three emergent insights to the study. First, the researcher noticed this period became a bonding and rapport building time for the TC and the researcher. Second, from the rapport the researcher had with the TCs, the researcher was able to follow and observe the TC working with team members without appearing to be a distraction to the TC or the team member. The TC would introduce the researcher to the team member and say something similar to "he is shadowing me today and learning how to be a TC" and the TC then went on to support the team member. The TC told the researcher how the team members were accustomed to having people 'shadow' or follow individuals about as a way of learning. From that point in the pilot study and throughout the full study, neither the TC nor the researcher discussed 'shadowing' and it was implied that the researcher was 'following' the TC to learn about something, perhaps being a TC. The researcher did not explore the concept of 'shadowing' as he felt it was beyond the scope and focus of this study. The TC, the team members, and the researcher quickly developed an open and relaxed rapport.

During the observation, a light conversation between the TC and the researcher took place. The conversation would usually be the TC telling the researcher about the team member's situation and how the TC was addressing it and helping that person. From these observational conversations the researcher would note repeated patterns of words, phrases, or stories used by the TC while supporting the team member or explaining the situation to the researcher. Guided by the observation protocol the researcher noted:

- Examples of Rules-of-Thumb – (possible);
- What was being done – the task;
- When during the task was the rule noted;
- How was the rule shared;
- Verbal Cues – If/then scenario;
- Action Cues; and

- Resources used by TC.

An example of one experience was:

Rule-of-thumb – (possible): "Let's start at the beginning." This was a statement offered by several TCs when helping a team member resolve a problem.

What was being done - the task: The team member was entering data regarding a customer account and was not sure how to continue.

When during the task was the rule noted: The TC would suggest "let's start at the beginning" if the resolution to a concern could not be immediately offered.

How was the rule shared: The TC spoke directly to the team member "let's start at the beginning." The TC would be sitting at the side of the team member and both were face-to-face.

Verbal Cues – If/then scenario: The TC would be pointing to a monitor and asking the team member statements that contained if/then scenarios such as, "if you see this then what…?"

Action Cues: The TC and team member would focus on the monitor and point to various data entries.

Resources used by TC: Only the team member's monitor.

The researcher noted repeated observations and then referred to these observations during the interview process. The researcher would ask if the TC recalled saying "let's start at the beginning" and if the TC suggested it was one of their personal rules, the researcher would continue discussing the history behind that statement or potential rule. During the second interview, the researcher would then have the TC describe the experience(s) observed when the researcher captured that rule. And during the final interview, the

researcher would have the TC discuss how he or she understands that rule now and into the future.

Other examples of repeated observations collected were: statements such as – "go with your gut," "it's not carved in stone," "take a breather," or "think about it, it's common sense." The researcher also noted for discussion repeated physical actions such as sitting, standing, kneeling, a pat on the shoulder, or simply walking through the aisles and saying hello for discussion during the interviews. To review, the researcher used close observation to collect what he thought could be potential rules-of-thumb and then used these observations during the interview process to explore and understand the experiences of a TC when using rules-of-thumb to do their work – to share knowledge with their team.

Interview

RRT-33   People see interviews as some type of conversation or talking experience. How will you talk to the participants and what will you talk about?

The literature review and van Manen (1990), Seidman (1998), Moustakas (1994), Creswell (1998), Stake (1995) and Yin (2003) suggest in-depth interviews are a primary data collection method. This study used the three-stage in-depth interview method of Seidman (1998). The researcher conducted three interviews per participant approximately one-hour long and staggered one week apart. Following Seidman's suggestions the researcher asked each participant one guiding question at the onset of each interview session.

1. The researcher asked the participant how he or she happened to use and recognize rules-of-thumb in his or her life as the guiding question in the first interview.

2. The researcher asked the participant to recreate the current experience of using rules-of-thumb at work as the guiding question in the second interview.

3. The researcher asked the participant how he or she understands rules-of-thumb both now and for the future as the guiding question in the third interview.

The researcher conducted three follow-up interviews lasting 45-60 minutes with each participant after the formal interview process to further clarify his understanding of the participant's experience. Van Manen (1990) suggests a researcher will go back several times as needed to the participant to determine, "is this what the experience is really like?" (p. 99).

Recording Data and Storing Data

RRT-34   Know how to capture, store, and retrieve large amounts of data! The emphasis is on large amounts of data!

Two essential processes of a study are recording information and storing data (Creswell, 1998). In addition to note taking during the observations and interviews, the interview sessions were audio-recorded. Permission to audio-record the interviews was part of the criteria of the purposeful sampling process. Following the recording of data from the interviews the researcher transcribed the interviews into documents that were imported into qualitative analysis software. The researcher removed personal identifiers during transcription. The transcriptions were backed-up (duplicated) to protect from any type of loss. The transcriptions were stored on removable cd-roms for easy access and portability. All data remained secured and confidential to protect the rights of the participants as per the requirements for approved human subjects research.

Resolving Field Issues

RRT-35   Be prepared and expect the unexpected. Start small with a pilot and then move on with confidence as to what to expect for the duration of the project.

As recommended by Creswell (1998) and Moustakas (1994) the researcher created a complete checklist of potential field issues prior to entering the field. The field issues addressed prepared the researcher for expected routines and unexpected events. The pilot study provided the researcher with ample examples of what to expect during the full study.

The only field issue the researcher dealt with during the study was the rescheduling of meeting times with the participants. Data collection, continuous analysis, and follow-up interviews took nine months. The researcher demonstrated needed flexibility in meeting the logistical requirements of the participants and the organization during this period.

All recording equipment performed as expected. The organization granted access to the TCs' complete working environment including private meeting rooms for interviews as needed, for as long as needed.

Analyze Data

RRT-36   Be focused and let your approach guide your analysis. Be comfortable with large amounts of data. Relax, read, re-read, and reflect. Plan on dwelling within the data over time. Organize. Analyze. Interpret. Inform.

The researcher found qualitative data analysis and presentation to be an emergent process with no hard and fast rules to follow. Sensitive to the general suggestions of data

analysis and representation procedures by Creswell (1998) the researcher addressed data

managing, reading and memoing, describing, classifying, interpreting, and representing.

Considering the large amount of data, van Manen's (1990) thematic approach of

analyzing the data strongly influenced the researcher. Using a combination of holistic

reading and selective reading approaches, the researcher read and re-read the entire text

to first understand what was before him. Then, within the whole text, the researcher

noted the rules-of thumb that shaped the understanding of the text. After teasing out the

rules-of-thumb the researcher was able to organize the collection into meaningful themes.

The following addresses the researcher's approach through the analysis process.

Data Managing

RRT-37   Develop a protocol to manage the data. Tacit data is reflections, feelings, and memories, and when uncaptured slips away. Explicit data is reproducible and always available to dwell within.

Develop a protocol to manage data (Creswell, 1998). The researcher noted

observations within a field notebook and then transferred these notes into a word

processed document. He then filed the documents according to date and time of

observation. The documents were organized by coding in such a fashion that only the

researcher could match the observations with the participants involved ensuring

confidentiality.

The researcher personally transcribed all interviews. The researcher listened to

each recorded interview and transcribed the interview as clearly and accurately as

possible. There were times when a judgment and interpretation was made as to what the

participant was saying.

To ensure accuracy in understanding the participants words the researcher conducted three separate follow-up conversational interviews with each participant. The researcher felt these additional interviews were necessary to clarify and understand the participants experience with rules-of-thumb.

Reading and Memoing

RRT-38   Spend time with the data. Dwell in it. Every time one dives into the ocean
           of data one sees different things. Sooner or later one will "know" when to
           stop and move on. This knowing is an inner tacit knowing, saturation
           perhaps, but an inner knowing. Trust in your inner knowing. Live with the
           data, dwell in it and reflect upon it. Give it time to express itself.

Creswell (1998), van Manen (1990), Seidman (1998) agree the researcher must become familiar with and play with the data all the while having the focus of the research question in mind guiding the analysis.

This study was an emergent process and to fully understand and grasp the experiences of the participants related to using rules-of-thumb, the researcher constantly reviewed the data collected as an ongoing part of the analysis process. During the three stage interview process the researcher listened and re-listened to the interviews while noting insights. He also referred to any field notes taken at the time of observation and/or previous interviews. The researcher prepared for the next interview with the participant by listening and re-listening to the past interview and reviewing any field notes related to that particular participant. Recall the interviews were one week apart. The researcher spent considerable time dwelling in the data from the inception of the study until the final presentation of the findings, all the while attending to maintaining

quality, trustworthiness, and authenticity as described in the topic Quality of Study later

in the chapter.

Describe the Phenomenon

RRT-39   What is this notion, happening, experience, essence, or observable fact?
          Begin to make sense of it and again let the research problem and research
          question be the guide.

        Creswell (1998) suggests a time comes for the researcher to describe the meaning

of the experience, the case and the context. The researcher felt early in the study he was

able to begin to describe and understand the meaning of what it was like to use rules-of-

thumb to share knowledge by the fact that he was collecting the participants' rules-of-

thumb during observation and interviews. However the most important insights did not

occur until the conversational follow-up interviews and the creation of this document.

Classify

RRT-40   Develop patterns, themes, structures, insights, and hunches. At this point
          wonder may even come into play. Try to see what is apparent as well as
          what is not obvious.

        Discover and group meaningful statements within the collection of data (van

Manen, 1990; Creswell, 1998). After the researcher completed the observations, the

three stage interview process, and all transcriptions, the researcher read and re-read many

times the entire transcription as one whole document or story. Dwelling upon the story

before him, the researcher asked himself one question. What was the experience that lie

back of what was before him? The researcher used a process of thematic analysis

creating categories that made sense to the participants and him. The themes may come

from the narrative as a whole, a passage, or line-by-line (van Manen, 1990). From the

categories, possible interpretations of the essence of the phenomenon were constructed.

The researcher realized within the text before him lie over 1500 participant rules-of-

thumb used when the participants were involved in the experience of sharing knowledge.

The researcher then met with each participant for a total of three more follow-up

conversational interviews to winnow through the list of rules-of-thumb and determine if

the researcher was correct in classifying these potential rules-of-thumb as the actual

rules-of-thumb of the participants. The participants also helped the researcher understand

the overarching theme of sharing and the different reasons for sharing one's rules of

thumb, which became the subthemes. From those three additional interviews with each

participant the researcher was able to fairly and accurately present what it was like for the

participants to experience the use of rules-of-thumb when sharing personal knowledge.

Qualitative Data Analysis Software

RRT-41   Technology saves time in sorting, retrieving, and re-living the study.

Qualitative data analysis software assists a researcher in grouping, sorting,

classifying, and reconnecting with interview and other collected data (Seidman, 1998;

Creswell, 1998). The researcher selected NVivo software to assist with the data analysis.

The software does not analyze the data. The software only acts as a tool to assist in

reading and memoing, coding and describing, classifying, and interpreting the data. The

primary source of the data was the transcriptions of the participants' interviews. The

researcher also entered documents created from field notes and reflections. The

researcher imported the transcriptions and documents into the software and then analyzed

as described above. The value of the software was the ease of searching and retrieval of created codes and categories. The researcher played with the data and explored unlimited possibilities of interpretation using the speed and efficiency of the software. However, as Seidman (1998) suggested, the researcher worked between paper and on-screen because interaction on-screen or within paper text offer different insights and different personal responses. The researcher found this to be so. The researcher found the paper text more comfortable and began with a paper text; if you will, a book of experiences. The researcher printed out all transcripts and documents, read, highlighted, noted in margins, and 'played' with the text to understand the whole story. Then the researcher did the same but this time with the software. The software enabled the researcher to digitize and work toward an understanding, description, and interpretation of what the data was conveying and then put that understanding, description, and interpretation into a form for all to view.

Interpret

RRT-42   Here is where one 'reads between the lines' and begins to understand and express that understanding in new and different ways. Take nothing for granted even if nothing appears to be new. Ask yourself: How do the participants describe their experience? How do I, the researcher, describe their experience and my own experience?

The researcher developed a general description of the experiences collected. The researcher explored the experiential descriptions for textural descriptions (what happened) and structural descriptions (how the phenomenon was experienced) to develop a deep description of the experience with the phenomenon (Moustakas, 1994; Creswell, 1998). Wolcott (1994) suggests that the data tell its own story. Van Manen (1990)

suggests that a transformation process takes place continuously and all experience is an interpretation of life by an individual.

Represent

RRT-43   How can the story be told? Share the experience, the entire experience in a way that informs all who read this study. The goal is a 'phenomenological nod' from the reader of this work. Consider the word represent as re-present – to present again.

How will the researcher tell the story of his participants' experience? Creswell (1998) suggests presenting a narrative of the experience and supporting tables, graphs and figures. Moustakas (1994) suggests the final analysis is the exhaustive description of the participants experience with the phenomenon. Van Manen (1990) suggests that the researcher's text need be oriented, strong, rich, and deep. He also implies it is the researcher's responsibility to present or re-present the experiences of the participants in a manner that allows another to share in that experience.

For this researcher, to represent or as he now suggests re-present was the most difficult part of this study. He continuously asked himself, "is this what it was like for the participant?" as he tried to put to words the experiences he collected. It was after 26 months of dwelling in the material the researcher became comfortable that he was able to answer the study's research question and at the same time connect the reader as much as possible to the experience of the study's participants. He did this by explicitly stating his researcher rules-of-thumb gained from this experience, the rules-of-thumb of the participants collected during the study, and the possible rules-of-thumb aka shorthand statements of the authors from the reviewed literature. In doing so, this document became a shared experience: by being oriented to bringing an understanding to the

research question; by being presented strongly by redundantly presenting rules-of-thumb

in both a transcontextual and contextual manner; by being richly presented with

supporting context to the participants' rules-of-thumb in their own words; and finally by

being presented in a fashion that explored and described the participants' experience with

rules-of-thumb used from the life history of the participant with that rule.

The researcher re-presented the experiences of the participants as a composite

narrative listing the researcher's interpretation, transcontextual statements, and contextual

narratives. As said earlier, this was an interpretation and a judgment call but the

researcher felt that the reader will 'nod' in agreement and understanding as he or she

reads this shared experience.

Quality of Study

RRT-44   The study should be meaningful, accurate, and credible. All participants of
          the study: researcher, participants, and readers of the final report, should
          benefit from their efforts.

The researcher attempted to follow the guidelines (rules-of-thumb) of van Manen

(1990), Seidman (1998), Stake (1995), Creswell (1998), Moustakas (1994), and Wolcott

(1994) throughout the study. The researcher presented the research process within this

document. The quality, trustworthiness, and authenticity of the study focused the design

and processes from beginning to end. For example, the researcher constantly attended to

a question posed by Seidman, 1988, "what meaning is it that an interview brings forth

and a researcher reports in a presentation, article, or book?" (p.16). Seidman continues

asking, "is it anybody's meaning?" (p.17). Presenting a study that had value, was

trustworthy, and authentic was the goal from the onset. The researcher followed

Creswell's (1998) suggestion of eight standards to demonstrate quality and verification within a research study. The eight standards were:

- Prolonged engagement and persistent observation;
- Triangulation;
- Peer review or debriefing;
- Negative case analysis;
- Clarifying researcher bias;
- Member checks;
- Rich thick description; and
- External audits (p. 201).

Regarding the above list of standards for quality and verification, Creswell states "I recommend that qualitative researchers engage in at least two of them in any given study" (p. 203). The researcher conducted five of the eight standards:

- At the onset of the study the researcher engaged in clarifying researcher bias. The researcher, to the best of his ability, presented thoughts, feelings, and insights within himself regarding the study and the role of the researcher regarding the study.

- The researcher had a prolonged engagement in the field with the participants of nine months.

- The researcher used triangulation by having multiple participants (12) within the same job, 48 hours of close observation of the participants on-site, and 36 primary in-depth participant interviews lasting 60-90 minutes each, with 32 follow-up conversational participant interviews lasting 45-60 minutes each.

- The researcher used extensive participant member checks to ensure an accurate portrayal of the participants' experience. The 32 follow-up conversational interviews purposefully checked for accuracy and understanding of the

participants' experiences – insuring the meaning presented was the participants'
meaning.

- The researcher re-presented rich thick description, in the words of the
  participants, as much as possible, to enable transferability and sharing of their
  experience.

The researcher believed the study before you offers quality, trustworthiness, and
authenticity. It is the profound belief of the researcher he conducted this study to the best
of his ability and continuously respected the wellbeing of all parties involved.

Methodological Limitations

RRT-45   Know the limitations of your work.

The following are methodological limitations considered by the researcher of this
study:

- The researcher was the only individual analyzing the data during the entire study.
  Participant member checking was the only method employed to ensure the
  analysis of data was accurate.

- The researcher did not conduct a formal external check of the research process
  beyond informal conversations with peers.

- The researcher could not be certain the participants told the truth. During the
  study the researcher accepted all participant statements as true for the participants
  at the time of the statements.

- The researcher could not ensure if others were conducting the same study they
  would find the same results and state the same conclusions.

- The researcher could not be certain if he conducted a similar study using the same methods with other participants, at another time, in another environment, and knowing what he (the researcher) now knows, how he would respond or what the conclusion would entail.

- This study cannot generalize the findings beyond the particular participants involved (Creswell, 1998; Moustakas, 1994; van Manen, 1990).

- This study was a single exploration, description, and interpretation of a particular group of individuals' experience of using rules-of-thumb when sharing knowledge.

However, the understandings garnered and descriptions presented are transferable to future studies, practitioners of workplace knowledge, and interested knowledge workers.

Pilot Study

RRT-46   Practice makes perfect, or at least better! Try a controllable "practice run" and make necessary adjustments prior to the full study. Avoid wasting time, resources, and frustrating yourself and others by seeing what works and what does not and making adjustments.

Seidman (1998) encourages a pilot study to enable the researcher a chance to see what elements of the study support the study's objectives and what elements detract from the study's objectives. A pilot study field tests the investigation. Maxwell (1996) adds the value of a pilot study comes from the ability of the researcher to test concepts, methodology, and the practicality of their proposed study.

The researcher conducted a pilot study within the located organization before a full study occurred. The pilot study was a completely transparent process of the full study but only included two participants. The organization and the researcher selected

the participants. The criteria of selection were time, desire to participate, having

experience with the phenomenon studied, and being a TC. These individuals participated

in a full four hours of observation followed by the three stage interview sessions. All

meetings with the participants were spaced one week apart. The experience of the pilot

study for the researcher suggested patterns of happenings appeared during the

observations. The researcher noted these happenings and discussed them during the

interview process. Follow-up interviews with the participants suggested these

happenings pointed to individual rules-of-thumb the participants were engage in during

their role as a TC. No changes in data collection procedures and data analysis procedures

occurred due to the pilot study. The researcher followed the pilot study with the full

study within the same organization.

Summary and Conclusion

Chapter Three presented the methodology for this study with a pathway of 30

topics. Researcher rules-of-thumb with supporting narratives offered the approach the

researcher employed from the beginning to the end of this project.

Chapter Four presents the findings of this study next.

CHAPTER 4

Findings

Chapter Four presents study results. The first three chapters presented an

introduction to the study, a review of the relevant literature that sensitized the researcher,

and the methodology. This chapter presents what happened, the results of the

researcher's efforts. The chapter is divided into four sections. The first section is a

summary overview of what happened during the study. The second section is a

presentation of the data in a way that shares the experiences of the TCs as they used

rules-of-thumb when sharing knowledge. The third section is the researcher's reflection

and summary of the data presented. The final section is a conclusion to this chapter and a

segue into the final chapter where the findings presented in this chapter are discussed in

greater detail.

Study Results Overview

This purpose of this project was to gain a deeper understanding of what an

individual experienced when using rules-of-thumb when sharing his or her knowledge in

the workplace. The study explored the experience of using rules-of-thumb, a form of

tacit knowledge, to pass on personal knowledge to another individual. A rule-of-thumb is

a general personal rule or rough guideline frequently used in the conveyance of personal

knowledge. Research appeared to overlook or take for granted the use of rules-of-thumb

when sharing knowledge.

The study focused upon the tacit knowledge of a TC and his or her experience of

using rules-of-thumb when sharing that knowledge. In that context, a TC was a subject-

matter-expert with the role of assisting others in troubleshooting, decision-making, and

completing work tasks. A TC was a knowledge support person. As such they had deeply

embedded personal knowledge formed by past experiences; therefore, the study's interest

was in the TC's experience, what that experience was like, when sharing a rule-of-thumb

to support another individual.

All that said, how does one answer this question, "What is the experience of using

rules-of-thumb like for a Technical Coach when sharing knowledge?" The following

narrative presents what was done by the researcher and the results found.

In the fall of 2005 after receiving permission to proceed with the study from the

researcher's doctoral committee and Penn State's Institutional Review Board, the

researcher located a site with potential participants for this study.

The site was a customer service operations center. This particular location held

approximately 800 employees with approximately 15 TCs at the time of the study. The

researcher met with the management of the company, discussed the study and was then

given permission to conduct a pilot study. The name of the company is confidential.

The management suggested the researcher meet with two TCs who had both the

time and desire to participate in the study. The researcher met with the individuals,

concluded they met the criteria of the study, and scheduled the observation dates and

times and then the interview dates and times.

The observations and interviews were spaced one week apart. The pilot data

collection process began and concluded during the month of December 2005. The

researcher spent four hours observing each participant as they performed their role as a

TC. During this time the researcher noted patterns of behavior, patterns of words used,

and potential implied guidelines used while the TC worked and supported their team in

answering customer calls and processing customer data. The researcher completed both participant observations before the interview process began.

To prepare for the three stage interview process during the pilot study the researcher reviewed his field notes and selected an observation he perceived as a rule-of-thumb in use. That observation was then introduced into the first interview of the three stage interview process. For example, the researcher noticed that the TC would sit with some Customer Service Representatives (CSR), stand by some, and kneel by others. After rapport was made in the first interview the researcher mentioned to the TC that an observation was made where he or she would stand, sit, and kneel at various times when working with a CSR. That comment was followed by a question of whether the TC could recall that experience and in all cases the TC recalled all observations mentioned by the researcher. "Tell me about what was happening at that time," asked the researcher. The TC responded by describing the situation and what he or she was doing. It was at that moment a key insight emerged. A TC ended their story with, "that's my rule." Picking up on that statement, the researcher then began to ask that TC and later the other TC what is your rule in this instance or with that person or during that moment. And it was then the flood gates of personal rules – rules-of-thumb – began to flow quite freely. Until then they did not. From that moment and into the full study the researcher would insert the probe question of "what is your rule…" into the conversational interview when he felt it was appropriate. That became a critical component to this study – what is your rule?

After the researcher completed all interviews, he met with each of the two participants to discuss his preliminary findings. All findings and outcomes were

satisfactory and the researcher suggested to the organization that a full study ensue. All

agreed and the full study was scheduled for the spring and summer of 2006.

Originally the researcher intended to interview a total of 10 participants with 2

during the pilot phase and 8 during the full study. The organization contact informed the

researcher that ten TCs desired to participate in the study, two more that originally

intended. The researcher met with all ten TCs and accepted all into the full study. No

one who desired to participate in this study was excluded. Thus, twelve of the possible

fifteen TCs were participants in the study. All who volunteered met the study criteria.

All were accepted by the researcher. The full study proceeded following the data

collection processes tested by the pilot study and detailed in Chapter 3 of this document

with the addition of the probe question, "What is your rule…?"

The full study produced these results: data collection from participants began in

December 2005 and ended in August 2006 with all data collection conducted in the

workplace; 12 participants started and completed the study; 2 were in the pilot study; 10

were in the full study; 48 hours of on-site observation occurred (4 hours per participant);

36 primary interviews (12 x 3 = three stage interview) occurred lasting 60-90 minutes in

duration; and 32 secondary follow-up interviews occurred lasting 45-60 minutes in

duration.

The researcher noted over 1500 statements during the data analysis process.

From these statements the researcher and participants reduced the count to 500 rules-of-

thumb that the TCs recognized as their own. From the 500 the researcher reduced the

count to 300 by combining similar and overlapping rules as one.

One main theme emerged with eight supporting categories.

A critical insight emerged during the review of the rules-of-thumb collected and the experiences each participant had with that rule. The researcher noticed an 'ah ha' moment with a participant. The TC upon reviewing the list of rules-of-thumb said, "That's my experience! That's my thoughts! I want to share that with you. Because now seeing it written on paper, yeah, I want to go and I want to share that with another person" (TCRT-300). That statement became a guiding thought for the researcher in deciding how to present and re-present the data in a fashion that a reader may be able to connect to the experience of the TC using rules-of-thumb when sharing his or her knowledge.

Presentation of the Results

Wolcott (1994) suggested letting the readers 'see' for themselves. He goes on to say, "More suddenly my growing bias toward letting informants speak for themselves is exactly that – a bias in favor of trying to capture the expressed thoughts of others rather than singularly on what I have observed and interpreted" (p. 350).

That said, the researcher believes the following presentation of findings was done in such a way that a story of the TC's experience using rules-of-thumb may possibly be both read and felt by the reader. What follows is a composite account of what the researcher felt was an accurate understanding of what a TC experiences when using rules-of-thumb in sharing his or her knowledge. As one TC said, "The only way to describe our experience is to tell our story". And to tell that story the researcher presents their story by the rules-of-thumb they use. Here is what to expect.

The presentation is a composite, a combination of rules-of-thumb standing alone, transcontextual, and then with supporting passages. It is the story of the 12 TCs, told as if they were one and it is told by the presentation of TC rules-of-thumb as collected.

First, three quoted passages appear and suggest why a TC wants to be a TC noted as *I'm a TC*. Next, following the idea of redundancy by Nonaka and Takeuchi (1995) the message of the experience is repeated in several ways. As the literature noted (Leonard & Swap, 2005) rules-of-thumb are shortcuts to contextual knowledge. With that in mind 300 rules-of-thumb appear divided by the eight supporting categories of the one theme – sharing. All rules-of-thumb are noted as TCRT (Technical Coach rule-of-thumb) and numbered for future reference.

Following the listing of the transcontextual 300 rules-of-thumb within the eight categories comes another review of the same rules. This time they are supported with passages coming from the TC interviews. All are numbered for reference.

The researcher 'cleaned up' the rules-of-thumb and passages to make this large amount of material readable. The researcher also removed identifiers, labels, proprietary statements protecting the confidentiality of the organization and participants.

Following the presentation of findings the researcher offered some reflective insights upon what was just presented before discussing these findings in greater detail in Chapter 5.

The Findings

What is the experience of using rules-of-thumb like for a Technical Coach when sharing knowledge? As the researcher explored that question with the TCs one overall

theme appeared. The overarching theme of SHARING – giving of one's self – became

obvious to the TCs and the researcher.

Sharing what? The researcher believed it was sharing of experiences of the

following:

- Succeeding – Staying in the 'game.'

- Coaching – Guiding one to success by sharing.

- Being – Knowing how to be a successful coach.

- Influencing – Remembering what worked for others and now for me.

- Evaluating – Appraising people.

- Instilling – Sharing what works over time; Influencing others.

- Knowing – Calling up my insight and inspiration.

- Future – Building upon my knowing.

Thus a TC used a rule-of-thumb in the sharing of their experience of succeeding,

of coaching, of being, of influencing, of evaluating, of instilling, of knowing, and of

future. One main theme of sharing with eight sub-themes or categories emerged in this

study. Rules-of-thumb supported all themes and appeared to guide the TC when sharing

his or her knowledge on the job. The TCs' story begins below.

I'm a TC

A TC's job is to improve quality, improve production, and one of the ways that you can do that is to give confidence to your people, because if you're not confident you are not going to have high production. It's just not going to happen and you won't have high production. And even if they get hit with like an error in quality or are struggling with quality, you still need to find a way to boost them up and build them up (TC).

It's my responsibility to get them more comfortable. My thought is that they need to be more independent. I mean I realize I might be putting myself out of a job by doing that but … if I … if it were my job to sit there and process all the calls

for them … why don't I just go back in the seat and process calls. It's my job to get them beyond where they are (TC).

I just can't help myself answering questions. I would sit in a cube with people and I would hear conversations over the wall and they would be talking about a situation and I would just over the wall … this is what you're going to do. You're going to go into this procedure. Okay, thanks. People would just walk up to me and ask me questions. So I've always been like that. I'm nosy… and curious … and I hear all of the conversations going on around me. And if I know something I can't help but share. And the feedback was that I can do it in a way that doesn't make someone feel like they don't know anything. It was more of a helpful way rather than a snotty know it all way. And then along came the role Technical Coach and it was perfect and I would get paid for doing the same thing (TC).

As a TC said, "It's inside my head. I know!" (TCRT-293).

From this study the following 300 rules-of-thumb emerged.

Transcontextual Rules-of-Thumb

Sharing – Giving of One's Self

TC Golden Rule   Share the information; give them the benefit of my experience

Succeeding – Staying in the 'Game'

TCRT-1   You're only as good as your numbers.

TCRT-2   Success is meeting your metrics; meeting your numbers.

TCRT-3   Success is our survival.

TCRT-4   Even if you didn't have a successful day, it was successful, if no one failed.

TCRT-5   If they don't succeed, I don't succeed.

TCRT-6   A positive attitude brings success.

TCRT-7   A negative attitude hurts success.

TCRT-8   Vent, walk it off, get calm if you want to succeed.

TCRT-9   Communicate your knowledge to help others succeed.

TCRT-10   Know that if your team succeeds you succeed.

TCRT-11   Don't give up. Keep trying and eventually you will succeed.

TCRT-12   Know you are doing your best.

TCRT-13   You want to see everyone succeed; remove barriers for success.

TCRT-14   Success is a human experience.

Coaching – Guiding One to Success by Sharing

TCRT-15   A good TC coaches, mentors, and makes a team successful.

TCRT-16   The coach is responsible for reaching the team's goals.

TCRT-17   Be a coach first and friend second.

TCRT-18   Care about your people, their future, and their destination.

TCRT-19   Be honest and get your team to trust you.

TCRT-20   They are your team take ownership of them.

TCRT-21   Make people feel important.

TCRT-22   Have respect for people for them to have a good attitude.

TCRT-23   Don't let one person spoil the success of the team.

TCRT-24   Make your team happy and make your team more productive.

TCRT-25   Everyone needs a pat on the back.

TCRT-26   Develop a person into someone who can come here, do their job, have fun, and be a little bit happier than they were before.

Being – Knowing How to be a Successful Coach

TCRT-27   Be approachable.

TCRT-28   Be technically knowledgeable.

TCRT-29   Be not afraid to not know the answer.

TCRT-30   Be able to find the answer.

TCRT-31   Be reliable.

TCRT-32   Take ownership of your team.

TCRT-33   Follow through on what your people need.

TCRT-34   Be there for your people.

TCRT-35   Be friendly.

TCRT-36   Be honest with them.

TCRT-37   Be trustworthy.

TCRT-38   Be respectful.

TCRT-39   Be courteous to people.

TCRT-40   Treat people as you want to be treated.

TCRT-41   Be able to care and show compassion.

TCRT-42   Know your purpose.

Influencing – Remembering What Worked for Others and Now for Me

　　From parents.

TCRT-43   Help someone understand what's going on.

TCRT-44   Help someone so they can make choices for themselves.

TCRT-45   You learn by observation and being shown.

TCRT-46   You learn by figuring things out on your own.

TCRT-47   Show respect to the people you work with.

TCRT-48   Values and beliefs of people you know well rub off on you.

TCRT-49   Strive to succeed. If you want it, make sure you can get it.

TCRT-50   My personality drives me.

TCRT-51   Life guides me.

TCRT-52   Share and gather life experiences.

TCRT-53   Most people know the information. They have to dig down –within- to get it.

TCRT-54   If you want to know the answer, you have to find out for your self.

TCRT-55   You will know if it is right or wrong by how it feels.

TCRT-56   Everyone needs a pat on the back.

From teachers.

TCRT-57   Don't assume the person knows what you know.

TCRT-58   Don't assume the person knows anything about the subject.

TCRT-59   What I know is a learned experience.

TCRT-60   Your first opinion of people can make or break a relationship.

TCRT-61   Step back and see the whole picture.

TCRT-62   Some people do better with freedom and responsibility.

TCRT-63   You can teach someone faster going to their mental level.

TCRT-64   You can teach someone faster going to their physical level (sit/stand/squat).

TCRT-65   Some people learn slower, some people learn faster.

TCRT-66   Ask people what way they learn better.

TCRT-67   Let people have options. Let people make choices.

TCRT-68   Don't be afraid to come out and say, do you understand?

TCRT-69   Be able to adjust your style.

TCRT-70   Ask questions, see if understanding is taking place. Do you know what I mean?

From mentors and peers.

TCRT-71   Learn from mentors.

TCRT-72   Learn by watching others who know what to do.

TCRT-73   Defend your team.

TCRT-74   Always be professional and courteous in getting your point across.

TCRT-75   Be able to pick out different personalities.

TCRT-76   Know what type of person you are interacting with.

TCRT-77   Show empathy when you've been in the same position and know the feeling.

TCRT-78   Be good at finding answers and pass along what you find.

My experiences influence me.

TCRT-79   Experience is learning from trial and error.

TCRT-80   Be able to go back and say you were wrong.

TCRT-81   Be able to go back and correct your mistake; learn from your mistake.

TCRT-82   Your knowledge stems from your experience.

TCRT-83   Your experience is the root of your knowledge.

TCRT-84   A share experience is where you bring what you know to support another.

TCRT-85   Shared experience is shared wisdom.

TCRT-86   Give choices of how to be successful from past experiences.

TCRT-87   Life is a teacher.

TCRT-88   Learn by observing.

TCRT-89   When you know someone you know what to expect.

TCRT-90   If you pay close attention to people you can anticipate what's next.

TCRT-91   If you can anticipate what's next you will usually have the answer.

TCRT-92   To learn, test the waters. Observe others. See what's happening.

TCRT-93   Be an observer. Watch people before you open your mouth.

TCRT-94   Learn from watching others.

TCRT-95   Put yourself into another's shoes or have them put on yours to learn perspective.

TCRT-96   Be aware of what you pick up from experiences.

TCRT-97   Give background information as needed when training others.

TCRT-98   Have structure but don't be limited by the structure.

TCRT-99   Not every situation in life can be handled the exact same way twice in a row.

TCRT-100   Ask questions before you give answers; see what the person did first.

TCRT-101   Highlight important things you need to stand out.

TCRT-102   After doing something for 8 hours a day, 5 days a week, it become rote.

TCRT-103   Use the advice of what works, what's proven effective.

TCRT-104   Advice comes from trial and error.

TCRT-105   Use proven examples.

TCRT-106   Advice is in the experience.

TCRT-107   Share what you know as you would recipes.

Evaluating – Appraising People

Reading people.

TCRT-108   Within 10 minutes with a person you should know what to do.

TCRT-109   Know that a person may not ask the right question.

TCRT-110   Watch how people respond.

TCRT-111   Look at body language.

TCRT-112   Be able to read people.

TCRT-113   Don't jump to conclusions, know what's going on before you act.

TCRT-114   If you can, talk rather than send emails.

TCRT-115   If you're in a bad mood or frame of mind, take a short break. Clear your
head.

TCRT-116   People react differently to different tones of voice.

TCRT-117   Show, don't tell. If you keep telling they won't get it in the long run.

TCRT-118   Watch facial expressions.

TCRT-119   Watch behaviors.

TCRT-120   If you pay close attention to people you can anticipate what's coming next.

TCRT-121   If you can anticipate what's coming next you usually can have the answer.

TCRT-122   When communicating watch your speed and approach; know the person.

TCRT-123   People ask questions for their own self-assurance.

TCRT-124   Reading people is a feeling; watch them and listen to them.

TCRT-125   Be an observer. Watch people before you speak or act.

TCRT-126   Make people feel important.

TCRT-127   Look at faces to see if people understand what is going on.

TCRT-128   Be aware of the people around you.

TCRT-129   Watch and observe people to learn about them.

TCRT-130   Watch how you deliver your body language.

TCRT-131   Adjusting your tone of voice will effect how a person responds.

TCRT-132   Learn about a person's style from body language.

TCRT-133   You can sense fear.

TCRT-134   You can feel what another person is feeling by watching them.

Knowing people.

TCRT-135   Reading people comes from knowing people.

TCRT-136   You need to know people to work well with them.

TCRT-137   Get a feel for how people work, think, and act from others.

TCRT-138   Sometimes people just need confirmation.

TCRT-139   Beware of different personalities.

TCRT-140   Be there for your people at all times.

TCRT-141   Get to know personalities.

TCRT-142   Once you know people and interact, opportunities appear.

TCRT-143   You can teach someone faster by going to their mental level.

TCRT-144   You can teach someone faster by going to their physical level.

TCRT-145   Some people learn slower and some learn faster; be able to adjust.

TCRT-146   Ask people what way they learn better.

TCRT-147   Sometimes sharing personal feelings helps.

TCRT-148   Little conversations may lead to important questions that may not have been asked.

TCRT-149   Know the balance of you team's talents.

TCRT-150   To learn from a person or about a person, shadow them if you can.

TCRT-151   Don't take people for granted, even if you know them.

TCRT-152   Approach people based upon personality.

TCRT-153   You need to build that personal bond with that person.

TCRT-154   If you don't know the person, you won't know how to react to them well.

TCRT-155   Knowing your team makes coaching them easier.

TCRT-156   Know the people you have to spend extra time with.

TCRT-157   Know that people learn differently.

TCRT-158   Know what people are capable of and give them a push in the right direction.

TCRT-159   Put yourself in another's shoes to get perspective.

TCRT-160   Know your confidence level and know their confidence level.

TCRT-161   We all get frustrated.

TCRT-162   Gear your help to what the person asks for, but listen and observe for others needs.

TCRT-163   People struggle with their personal confidence.

TCRT-164   Some people just need validation.

TCRT-165   Building relationships with people is worth the effort.

TCRT-166   Use open conversation, sit and talk with people and find out what they need and how you can help.

TCRT-167   TCs get a lot more personal issues to deal with because they know the person on a more human level. There is more of a relationship developed.

TCRT-168   Talking about something on a person's desk is a good way to get to know them.

TCRT-169   Lean about the person from the questions he or she asks.

TCRT-170   Just show people you care about them.

TCRT-171   Don't start someone's day off bad news.

Instilling – Sharing What Works Over Time; Influencing Others

Building confidence.

TCRT-172   Rules-of-thumb instill confidence.

TCRT-173   People ask questions for their own self-assurance.

TCRT-174   Help build people's confidence at all times.

TCRT-175   No matter what, stay calm and collected.

TCRT-176   Have confidence and faith in what you say. People will hear it.

TCRT-177   If you are confident your voice will display that.

TCRT-178   Put yourself out there, take chances, don't second-guess yourself.

TCRT-179   Some things like building confidence can't be easily taught.

TCRT-180   You can try until you're blue in the face if they don't want to change, they won't.

TCRT-181   Building confidence takes time.

TCRT-182   Be confident in your own skills, pull it from the inside out.

TCRT-183   Find out how far a person went to prepare for your help.

TCRT-184   Use positive reinforcement and real-time feedback.

TCRT-185   Just ask if a person can handle the job to test confidence.

TCRT-186   Don't walk away until you feel confident in the person.

TCRT-187   Always trust your judgment: be confident.

TCRT-188   Trust yourself. You always come to a point where you need to make a judgment call.

TCRT-189   Try to instill confidence in others.

TCRT-190   Give positive feedback to build confidence.

TCRT-191   If you want people to be more confident use "trust your judgment."

TCRT-192   Confidence is being comfortable in what you do.

TCRT-193   Know your material if you want people to be confident in you.

TCRT-194   Be totally prepared at all times.

TCRT-195   Never pretend to know what you don't know.

TCRT-196   You won't come across as confident unless you feel confident.

TCRT-197   You will know if it is right or wrong by how it feels.

TCRT-198   Talking about successes right away builds confidence.

TCRT-199   When you lose your confidence it is hard to get it back.

TCRT-200   In the beginning you just need to hear you are doing the right thing.

TCRT-201   Use a lot of positive reinforcement with each contact with a person.

TCRT-202   Most people already know the answer. Go with your gut.

TCRT-203   Lack of confidence comes from not knowing where to look for needed information.

TCRT-204   If you believe something – 100% – you pass it on with confidence.

Problem solving.

TCRT-205   Share and be able to go back and admit and correct your mistakes.

TCRT-206   Remember the problem is either the process or the person.

TCRT-207   Make sure you have enough time and resources in the day to do your work.

TCRT-208   Ask for help the problem won't get better and may even get worse.

TCRT-209   If someone doesn't want help, what you do usually won't matter.

TCRT-210   Set a goal of what you need to do in any meeting or session with people.

TCRT-211   The end result all comes back to how you and the other person interacted.

TCRT-212   Test for understanding by asking, do you really understand this?

TCRT-213   Bring them back to reality. Ask what's wrong? Where can we go from here?

TCRT-214   You can get a lot from people by seeing them in the lunchroom sometimes or when they're on break or just talking with them.

TCRT-215   When people can't figure things out, start from the beginning.

TCRT-216   Always use all of your resources available.

TCRT-217   Most people don't like to be told what they are not doing well, adjust your delivery.

TCRT-218   People may need to convince themselves of needing help or needing to change.

TCRT-219   To help a person improve their quality, make them aware of their problem.

TCRT-220 Listen to seasoned successful people for examples and ideas.

TCRT-221 Some things—like building confidence—can't be taught easily.

TCRT-222 Pass on, teach, and give away what you know.

TCRT-223 Test for understanding by having someone actually walk back through it.

TCRT-224 If they need to, have them take notes for future reference.

TCRT-225 Take the initiative to solve your problem before you call me.

TCRT-226 Look for patterns. When troubleshooting or problem solving look for patterns.

TCRT-227 Take notes and use notes.

TCRT-228 Tell a person why something is as it is.

TCRT-229 Listen to people and don't interrupt.

TCRT-230 Listen to them; they may answer their own questions for you.

TCRT-231 Always test yourself and others for understanding.

TCRT-232 Try to remove barriers limiting success.

TCRT-233 Come up with creative ways to solve new problems.

TCRT-234 Use the past to map out the future possibilities to solve familiar problems – be creative.

TCRT-235 Think outside the box and not about just what is in front of you.

TCRT-236 Sometimes you need to take the problem away.

TCRT-237 When you don't always have the answers, be good at finding the answers.

TCRT-238 Exhaust every avenue you have to answers to questions.

TCRT-239 Gray areas usually narrow down to two different scenarios.

TCRT-240 My job is thinking outside the box.

TCRT-241 Ask what kind of help do you think you need. It saves time.

TCRT-242   Gear your help to what the person asks for but listen and observe for other needs.

TCRT-243   Figure out what works best for them.

TCRT-244   You need to recognize the struggle people go through.

TCRT-245   People need to be treated in an individualized way.

TCRT-246   Ask WHY five times to get to the root of the problem.

TCRT-247   Know that most people are afraid to say they just don't know what to do; all because they don't want people to see them as not knowing the answers.

TCRT-248   Remove all barriers from a person's path.

TCRT-249   Always get to know the person to get to the root of the problem.

TCRT-250   Don't be surprised if the problem is more personal than business.

TCRT-251   Realize people tend to bring home issues to work and work issues to home.

Knowing – Calling Up My Insight and Inspiration

TCRT-252   Rules-of-thumb are timeless.

TCRT-253   Learned from life experiences with family, friends, peers, and everyone.

TCRT-254   Most of what you learn is from personal experience, informally.

TCRT-255   Nobody writes down what works. You can tweak them when needed which makes writing RTs down too much work.

TCRT-256   Try to write down your experiences and think about them – what happened, what worked.

TCRT-257   Advice – think of recipes, pass them along.

TCRT-258   A shared experience is a universal common type of thing.

TCRT-259   If you have this, then do this.

TCRT-260   What works is passed on from person to person.

TCRT-261   Learned experiences come from past times when things worked or didn't.

TCRT-262   Advice is your learned experience. I learned it and lived it.

TCRT-263   Shared Wisdom is advice.

TCRT-264   Try new ways, build on what works.

TCRT-265   Use your experiences as a touchstone.

TCRT-266   What works is unwritten and ingrained in me.

TCRT-267   Don't be afraid to learn by trial and error.

TCRT-268   What worked for you in the past may not work for you in the future.

TCRT-269   Seeing something done is only one side of it; doing it is the other.

TCRT-270   We should all share whatever works for us with the new person.

TCRT-271   I just know it, I just remember. It's in me.

TCRT-272   Past experiences help me relate to you and help you.

TCRT-273   Guidelines are written. Common sense is something everyone should know.

TCRT-274   It just makes sense to me.

TCRT-275   The end result should be the same but the way to get there can be different.

TCRT-276   There are things you have to do (rules) and things you don't have to do.

TCRT-277   Remember life experiences and how they feel.

TCRT-278   Get and keep your priorities straight.

TCRT-279   If it worked in this situation, maybe it will work in another. Give it a try.

TCRT-280   There is always room for interpretation.

TCRT-281   Nothing is carved in stone. Always trust your judgment.

TCRT-282   Learning comes from experience.

TCRT-283   Develop your way, what works for you.

TCRT-284   Be flexible and use what works for you to get the correct result.

TCRT-285   Most of what you learn, you learn informally.

TCRT-286   If it works, it will produce the desired out.

TCRT-287   Rules-of-Thumb are implied best practices, good advice, unwritten.

TCRT-288   Rules-of-Thumb don't always work; they are not set in stone.

TCRT-289   People need to develop their own rules-of-thumb of what works.

TCRT-290   In general some things I can pass on are interpersonal aspects of the job.

TCRT-291   It's hard to give advice to peers; all you can do is offer suggestions.

TCRT-292   Basically you live by your inner rules.

TCRT-293   It's inside my head. I know.

TCRT-294   Situations, questions, trigger what I need to do; what I know works.

TCRT-295   Learn from all the experiences you've had and pass that on.

Future Thoughts – Building Upon My Knowing

TCRT-296   A handbook doesn't give you the same experience or feeling as doing the job.

TCRT-297   Let people have the experience of learning on their own.

TCRT-298   Share the benefits of the experiences I've had.

TCRT-299   Pass along—take any advice that comes your way and find out what works best for you.

TCRT-300   Rules-of-thumb ... That's my experience! That's my thoughts! That's me!

Contextual Rules-of-Thumb

Sharing – Giving of One's Self

TC Golden Rule   Share the information; give them the benefit of my experience.

> Well, ok, I like this. I can do this now. My theory is that...I'm gonna share the information. Try to give them the benefit of the experience I've had. If they chose to take that knowledge and utilize it …great! Ya know … maybe we can avoid some poor outcomes. If they choose not to at least

I've given them that information. I've given them those tools. So I think its better to share that information. Give them the choice to potentially be successful or not successful but with all the information that I can possibly give them. And then perhaps then they will take that information and share that. because when I leave the floor they still have questions. They'll ask each other and a lot of times they'll say she told me this … ah ok and the other person will take it. so it just becomes like a grapevine type of thing. With the end I have to follow up and say this is what I said … it may have mutated but this is what I said. Like a recount (TC).

… if I could figure out what it is that I do well and what kind of profession that would lend itself to. I – ya know – because I love this but … hmmm … Problem solving. Solving the puzzles. Figuring out what's causing something. The aha look when someone gets it because I explained it in a way that they can understand it (TC).

Like, how do I feel sharing that? Basically, it makes me feel good, because I'm passing on things, my experiences that I've learned. It's great when you see it worked. Like in her case. Even though it's slow. You start to see it working (TC).

Succeeding – Staying in the 'Game'

TCRT-1   You're only as good as your numbers.

It's high production. … the stuff involved … it's high production. It's fast-paced. You have to deliver both quality and production. I think as a technical coach you're actually they're to improve the quality of performance, but the goal is that the quality of the performance as you enhance it and teach it, increases the production on the backend. Like that's kind how it works (TC).

You're only as good as your numbers. Hey, look at my numbers. That's what it always comes down to, look at my numbers (TC).

Punch in. Punch out. Break time. Lunch. Meet your metrics. Home you go! It's only in front of a computer (TC).

I mean as far as all of the metrics that they have to meet its production. Think of this department, you have to process so many calls per hour. (TC).

TCRT-2   Success is meeting your metrics; meeting your numbers.

There are people who are backed up against a wall. They have one month to improve their metrics otherwise they are walking out the door because their performance has been so poor (TC).

TCRT-3   Success is our survival.

Help them succeed; even if they're attacking me, I have to help them succeed. Their job depends on their performance. Usually, there are people who are backed up against a wall, they have one month to improve their metrics otherwise they are walking out the door because their performance has been so poor. So it's their survival, which means that they tend to fight or flight, and sometimes the fighting is personal. It's, you didn't give me this, and you didn't do this for me. So, then based on that my survival as a tech coach depends on their success. So I have to help them succeed, even if they're attacking me. I have to help them succeed. And then within my peers, we are ranked, so while we are one big happy team, and we need to act like that and share information and everything else, you know, when it comes down to our merit increases and our standing we absolutely have to look out for ourselves and our survival, and that is dependent upon the team and what we do, in addition to the team metrics. So, absolutely, survival. … you know … I think I have the culture ingrained in my head so, survival is not enough. Success is our survival line. Yet sometimes you just try to make it through the day without any blow ups though (TC).

TCRT-4   Even if you didn't have a successful day, it was successful, if no one failed.

Sometimes every day is just the survival part and then it's putting even more into it to get to succeed. Because there's times when you just can't do it... you can't get to where you want to be obviously without the team. It's like our success is measured by their success. But there are days when you know what, today is a wash. It's just, can we crawl out of this hole? Can we not drown and stay afloat, and we will be fine? So you use what you have and you just say we just need to make it through this. And then usually take your experience from that day and put it into the next day to make it a good day. Like, even if you didn't have a successful day, it was successful, if no one failed (TC).

TCRT-5   If they don't succeed, I don't succeed.

She's doing well; she's not receiving any errors. That I was able to help her, that I was able to give her some of what I know so that she's doing well at her job, which makes me feel good, because if they do well I do well. So it makes me feel good. If they don't succeed then I don't succeed that's how I look at. Even the people at the bottom of the scale, if they don't succeed, I don't succeed (TC).

TCRT-6   A positive attitude brings success.

I always try to show a positive attitude with them, because I feel like any negativity from me, that's going to reflect on them, just because we're all in it as a team. So if they see me being negative. They are going to feel negative too. And therefore once you start feeling negative you won't succeed (TC).

TCRT-7   A negative attitude hurts success.

I do feel little negative and it's making me feel like I'm not succeeding, because I'm letting that negativity take over me. And I don't feel that I perform as well when I'm negative (TC).

TCRT-8   Vent, walk it off, get calm if you want to succeed.

Try and walk it out. Vent. I always try to stay positive because I figure life … it's not worth spending your time being negative. That's just life. I don't want to be negative in my life. You waste your time. So I'll say to friend this is purely a vent session. I don't want you to run to somebody and do anything about it. You are going to get it and here it comes. So that makes me feel better. To vent. It's a vent session. Just hear me out. You don't need to take it anywhere. Just listen to me. I need to get off my chest. I'm not one to keep things on my chest. I have to get them off my chest. If I let them sit there, I get negative. And I don't want to be negative (TC).

TCRT- 9   Communicate your knowledge to help others succeed.

It's a rewarding experience to communicate your knowledge to others and help them succeed. It can be difficult with new hires, because our training here doesn't get to the detail level of how to actually process the calls. It's very high-level. Essentially, it falls on us to make sure that they know all the tricks and they know what to look for (TC).

TCRT-10   Know that if your team succeeds you succeed.

Well, you know, that goal is self-centered, because if you succeed … essentially if they succeed you succeed. They meet their metrics you meet your metrics and it all roles uphill. That aside, I still like to see the ray of light that comes to someone's face when they say, wow so that's how you do it! Oh, you know, I was doing it this way. It was so much harder. So, so yeah. That's why I like to succeed. For those two reasons. Yet and of course one of them is I don't know what you call it, it seems self-centered (TC).

TCRT-11   Don't give up. Keep trying and eventually you will succeed.

Don't give up, keep trying, and you will eventually succeed. I'm the perfect example of that. And ... don't give up, if you fail, try again. It shows initiative. I've learned a lot about living in the corporate world (TC).

TCRT-12   Know you are doing your best.

So what I would say is success for me, is them telling me that they like me. Yes that I've done a good job and helped them succeed (TC).

TCRT-13   You want to see everyone succeed; remove barriers for success.

You want to see everyone on your team succeed, but usually they're missing one metric usually not all of them, remove that barrier (TC).

TCRT-14   Success is a human experience.

… my team gave me a trophy, a gift. Instead of something more material or a gift certificate they got me a trophy that said, to the best subject matter expert or to the world's greatest subject matter expert. And we all thought of these real tear jerker stories. It all came from like a human kind of interaction (TC).

Coaching – Guiding One to Success by Sharing

TCRT-15   A good TC coaches, mentors, and makes a team successful.

The purpose and the role of a TC is to coach, to mentor, and to have my team succeed, so I look good (TC).

TCRT-16   The coach is responsible for reaching the team's goals.

We are responsible for making the team successful in producing a desired result -- that's actually written in our job requirement. It is a measurement that we are held to. So if the team is not meeting their goals by a good amount, our rankings are not there (TC).

TCRT-17   Be a coach first and friend second.

You're not their friend, but you are the person who's going to help them achieve their success and remind them of the things they should not be doing (TC).

TCRT-18   Care about your people, their future, and their destination.

They're mine, these people on the floor. I take ownership of them too. I'm responsible for them. I help them figure out where they want to go and

what they want to do. And even in my daily coaching, coaching someone letting them know there is a different position for what they seem to do the best. There is a position there fore you, but let's succeed here first and then you can get there. I guess I feel like I'm doing a lot of good for them, because of my knowledge in helping them and I care about them. I care about their future and their destination (TC).

TCRT-19   Be honest and get your team to trust you.

It's probably all of the things I mentioned before. Your team is your team. Their success is based upon you. Always follow-up with them. Always follow through with them. Be honest with them. Get them to trust you. Make yourself approachable. Never yell and scream at them and have patience with them. And if you don't know where to find something. Or how to find something. Come see me and we will find it together (TC).

TCRT-20   They are your team take ownership of them.

I think part of coaching is taking ownership of your team. Making them your team (TC).

You're responsible for them. They are yours (TC).

Yes. You have to be careful taking ownership, because I guess I feel like I don't want to make them feel like I'm above them, because I'm not above them. I'm on the same level they are. I think that's one of the reasons why I do so well. I don't treat them like their below me. I treat them as equals. Help them grow or help them to fail. When TCs don't take ownership they don't take the responsibility and I think the team … I know from being there you can feel that. You can feel that from your TC. When they really don't take ownership they don't treat you with the respect that you should have (TC).

TCRT-21   Make people feel important.

Be there for them. Follow through. Answer their questions. Give back to them. Make them feel important. Talk to them the way you would normally talk to another TC. Don't make them feel as if they are under you, where you are up over them or better than them. I don't believe in that at all (TC).

TCRT-22   Have respect for people for them to have a good attitude.

You have to respect people for them to have a good attitude. Appreciation falls in a little there. But respect is big. Like, I feel like I respect my team and they respect me. We have good lines of communication. They know

they can come to me with anything. I'm approachable. I think respect has a lot to do with that. If you don't show them respect, and you are a TCs that goes out on the floor and makes them feel stupid by answering a certain question that they should have known … If you make them feel stupid then they are just going to fail. Because they are not going to be comfortable to ask you any other questions that possibly could be a stupid question. And they are going to fail, and there's no way you can help them because they're not going to talk to you anymore. So you have to stay positive with those people at the lower end of the scale and make them still feel comfortable with you, so that they can succeed. And then I succeed (TC).

TCRT-23   Don't let one person spoil the success of the team.

I think she's just completely frustrated with the job. She just completely frustrated with everything. She's just taking it out on everyone when she's at work. So, it starts to rub you the wrong way and then you do things that you really don't want to do. You would never want to be somebody like that. But she's almost to the point where we kind of figured out that she really doesn't want to be here anymore. She doesn't care about her times and this is bringing down the team(TC).

TCRT-24   Make your team happy and make your team more productive.

Oh yeah. I think it works, a happy team is a productive team. It really is. When they are miserable, they are not going to do well (TC).

TCRT-25   Everyone needs a pat on the back.

…and everybody was completely miserable. Nothing positive, everything was just negative. You don't want to come on the floor with a list of negative things, no matter if you're meeting your goals or not … to just pick every negative thing … and you're not going to get anybody to want to try harder that way. Everyone needs a pat on the back once in awhile. I think (TC).

TCRT-26   Develop a person into someone who can come here, do their job, have fun, and be a little bit happier than they were before.

I was given a new hire team, so, they were the ones who needed basically everything, more than people who have been here for three or four years and it was good because I can help them develop personally and with the job. It's a good thing you know, sometimes when you're taking a person who's been doing this job … three, four years as a CSR … sometimes are so burned out they're just like … I'm here because I needed paycheck; I'm never going to enjoy this job; I hate it. You may be able to help them a little bit but to really develop them into somebody who… even though

there's times when the job can be bad… but I want to develop them into someone who can come here, do the job, have fun, and be a little bit happier then before (TC).

Being – Knowing How to be a Successful Coach

TCRT-27   Be approachable.

You can't teach somebody how to be a good coach that I think is something a person has. You just have to be a good coach, you can learn certain aspects, but the approachability, your approach is a bonus that some people have when you get hired in this place. It's like, I'm not going to talk to her or I can't relate to that particular person, whoever it may be. It shows that being a good coach has to be not the best of everything but well-rounded. If you're not personable and you're not friendly and you have a puss on your face every day, someone is not going to approach you, versus somebody else so, approachable (TC).

TCRT-28   Be technically knowledgeable.

TCRT-29   Be not afraid to not know the answer.

TCRT-30   Be able to find the answer.

TCRT-31   Be reliable.

… when you have that, I think the technical knowledge is second. Because if you don't know an answer, as long should have the resources to find the answer you're fine. It's easy to find the answer. If your person doesn't know whether you have the answer or not, as long as you get them the answer they are fine with that. So it's more of reliability than knowledge. I think. Some people are really knowledgeable, but they can't get their point across and why would you want them as a TC at that point, because no one's going to ask them the question in the first place (TC).

To bring a new TC up to speed to work successfully with a team they need to:

TCRT-32   Take ownership of your team

TCRT-33   Follow through on what your people need

TCRT-34   Be there for your people.

TCRT-35   Be friendly

TCRT-36   Be honest with them.

TCRT-37   Be trustworthy.

In order to be a good TC you have to take ownership of your team, the good and bad. You have to follow up. If you take something away, if you say you're going to do something then you have to do it. You have to be approachable. You have to be friendly. You have to be patient. You have to be honest. And you have to be trustworthy. And they know right off that if you are none of those things or not one of those things. If you're not approachable, they are not going to ask you a question. Therefore, they have no TC. And how will they succeed? I base my success off of their success. If they don't succeed, I don't succeed. Because they're mine if I don't get them to succeed and that is a reflection upon me and I haven't succeeded. So that is taking ownership to me (TC).

TCRT-38   Be respectful.

TCRT-39   Be courteous to people.

TCRT-40   Treat people as you want to be treated.

You're going to respect people. You're going to be courteous to people. You're going to treat people like you would want to be treated. I mean, this is what I was always taught (TC).

TCRT-41   Be able to care and show compassion.

Well, also, I think compassion is a big part. Just showing somebody, you know that you care about them, besides just what they're doing at work. Yes, they're here to do a good job. But you realize other things may affect that. And that you are willing to try to help and care, based upon what they may be going through (TC).

I think it makes me feel really good because you see it right back from them. When I approach a lot of my team in the morning if I know there's something big going on, I might say how are you doing. Instead of me walking up and saying okay, here's your up-to-date stat. You're time is really terrible. What am I doing to them for the rest of the day? If they're already feeling bad and now they're coming to work, and it's the first thing I'm throwing at them. It is … they know about it and some point in the day I will be mentioning it, we will be working on it. But to start the day off like that! It's not going to help them get their time. They are going to be miserable and not want to take calls. And it's going to make it worse (TC)!

TCRT-42   Know your purpose.

I think to understand the big picture here, it's not just about your team member, it's about the site. It's about the company. And then about the bottom line, people that we are providing customer service to, because without them none of us would have a job here (TC).

Sometimes it's hard to get them to buy into that, but it's still the same rule for me coming in as a TC and for themselves on the floor (TC).

I guess where I'm coming from and if you can get them to buy into that more … but don't forget, they are the front-line people who take the abuse. And it's hard to feel for the customers when they're screaming at you. So all you want to do is basically get them off of your phone and tell them where to go. But the bottom line is they are the ones paying your salary (TC).

Influencing – Remembering What Worked for Others and Now for Me

  From parents.

TCRT-43   Help someone understand what's going on.

TCRT-44   Help someone so they can make choices for themselves.

Hmmmm … so how it is that I know these things? To share? … my father. As long as I've known or can recollect he would always … you know … be in the middle of a grocery store and he'd see somebody looking at two products and he'd say – You know my experience with this one is this or that one is this. He would always get involved in other conversations. In restaurants, you know, very politely, very casually, but always very willing to share information. And it just amazed me the variety of experiences he's had. And he still does that. Hmmmm … ok well that … that … makes a lot more sense to me. Ya know. Help someone understand what's going on and then they can make choices for themselves (TC).

TCRT-45   You learn by observation and being shown.

TCRT-46   You learn by figuring things out on your own.

My parents taught me. … no showed me and by observing. By just watching. I mean I picked up a lot by just watching. I don't think they actually sat me down and told me you had to sort the laundry. But I'd go in the basement and I'd see the 3 different piles of laundry. I went – ok – why are they in 3 different piles? What makes up the piles? I just sat down and figured it out - ok this one is white. This one is medium and light colors.

This one is darks and reds. You don't want the whites to get changed. But I figured that stuff out. I think the challenge for me is that not everybody figures out stuff like that or we'll sit down and we'll look at it like … like that and I feel it necessary to explain it to them in a gentle way (TC).

I think sometimes, because I think it wasn't always explained to me, so I think sometimes it would have helped to have just a piece more information. I may have gotten it faster. Ya know than taking the time to find out what it is. But I also find a lot of value in figuring it out myself. In having the ability to … break it down to why is it doing this? What were the reasons for it (TC)?

TCRT-47 Show respect to the people you work with.

Because I was brought up that way, my parents were always very like respect your elders. I was never allowed to call people by their first names. It was either Mr. or Mrs. and their last name. It was always very appropriate, if I had problems in school my mom wouldn't be like if somebody hits you hit them back. No, no, no! It doesn't work that way, so I think that was all part of how I grew up. My mom was never the one that did go out and act like crazy and start screaming or carrying on to get your way. Carry on like a normal human being. Show respect to the person you're working with and take it that way (TC).

TCRT-48 Values and beliefs of people you know well rub off on you.

If you spend a lot of time with the same person, you'll start noticing their characteristics and a lot of their traits and their beliefs will rub off on you. Growing up, if you have a large family, I see a lot of traits from me on my brothers and sisters.

TCRT-49 Strive to succeed. If you want it, make sure you can get it.

I'll do whatever it takes to succeed. It's in me. It's in me. I don't know, I think part of it is my work ethic and I received that from my parents. I know I got it from them because they are both definitely hard-working, both my mom and my dad. My dad always taught me whenever I would say that life is not fair … life is not fair get used to it, that's the way it is. So I guess I grew up knowing things aren't fair. You have to make them fair. And succeeding, that's why I don't fail. I succeed. Whatever I do, I will exceed at. Remember nothing is fair in life, so, if you want it, you have to make sure you can get it, that's one of my dad's rules (TC).

TCRT-50   My personality drives me.

            If I can find a shortcut to get to the end result and it will be correct, I'll find
            a shortcut.

            I think it's just my personality. I like to do things the most efficient way. If
            someone can show me a more efficient way, I'm very open to the change. It
            doesn't have to be my way, but it is my way until someone can show me, it
            can be done faster a different way (TC).

            Possibly, my mother and her showing me things … We are a lot alike.
            Show it showed me the fastest way to do things, the fastest way to do it
            because her way was always right. She didn't have the ability to change; it
            was the way it was. So, I learned her way, but I added with my little
            shortcuts and got the same result (TC).

TCRT-51   Life guides me.

            Everything we've talked about is life. Because it's life, from my hobby to
            my job to my life as a person, this as all the same; what I do in the hobby
            and job and what drives me. It's all me. It's life. It's the same (TC).

TCRT-52   Share and gather life experiences.

            Like I said before, my family took care of people, so maybe that makes me
            want to help people. And then life experiences if somebody hurt you, you
            know how it feels. So why would you do that to somebody else? Because I
            know how it feels (TC).

TCRT-53   Most people know the information. They have to dig down –within- to get
            it.

TCRT-54   If you want to know the answer, you have to find out for your self.

            I think it… probably over the years just my parents or maybe from school.
            You know the information. Just dig down! I used to freeze up on tests, and
            I used to think that was a huge thing. I would know the stuff at home and I
            would go to take the test and I would get a C on the test. I would tell
            myself that I know this stuff; I just need to dig deep down, get in there and
            put it on the piece of paper. I think that's a personal thing that just…
            probably from around seventh-grade, sixth or seventh grade, is where that
            all was going down. So it's just something that nobody's going to give you
            the answer. If you want to know the answer, you need to go find it for
            yourself and you just may need somebody to help you go to the right
            direction (TC).

TCRT-55   You will know if it is right or wrong by how it feels.

From my mother, that definitely came from my mother. As I got older, from conversations that we had, she'd go I've always thought you know right from wrong, but you're going to be in situations where I may not have talked to you about it before, but you will know by how it feels. You will know if it's wrong or you will know if it's right (TC).

TCRT-56   Everyone needs a pat on the back.

It probably goes back to when I was little, you know, even to my mom. Even if we are having serious conversation and I was being grounded or something, she would always end it with, you know, I love you. I know that by the end of the week you'll be able to do better … Always something positive (TC).

I think we picked a lot of these up, as we go along. It comes from our parents. How we were taught. Most of it are things that we've disagreed with them at that time … and learn to be the case. And then we pass this on (TC).

From teachers.

TCRT-57   Don't assume the person knows what you know.

Well actually that comes from advice I was given second-hand from a high school teacher. And it was along the lines of: when you are writing a paper about anything, you cannot assume that the reader knows more than you know. You cannot assume that the reader knows anything about what you're talking about (TC).

TCRT-58   Don't assume the person knows anything about the subject.

It was actually passed on thru someone else. It was what he was telling the class about when they were going to write a paper. As a – here is something for you to know, to understand. You cannot assume. You cannot make that assumption. So I've taken that in everything I'm doing – when I'm writing stuff, when I'm telling stuff. And sometimes I'll backtrack and say to them – I just don't know how much of this you already know so I'm just trying to fill the blanks here. We're gonna start at step one, if you already know this stop me we'll move on (TC).

TCRT-5   What I know is a learned experience.
Yeah they are, for me they're more learned experience … I … specifically to this job, there were times when someone has asked me a question, I had assumed that they knew the background, that they did all the research. So I gave them an answer purely based on their question. And they received an error. Because they hadn't done the background work. They hadn't done the research. And they had taken two steps beyond where they should have to get to where they were. And when I gave them the answer, it would not have been correct. And it came down to – well – my tech coach told me that that's what I should do. Yeah … that because I assumed you knew you were supposed to be there to make that decision. So I learned – ok – I can't assume (TC).

TCRT-60   Your first opinion of people can make or break a relationship.

It's the same way with anything, it's the same with college, and it's the same with work. It's like walking into a class with the new professor one-day and say this is going to be the toughest class of my life just by the way that they set their stuff down on the desk. So it goes from that into maybe the first day that you work for a new company and how they do orientation and you wonder if this is going to be good or if they will give you a lot of opportunities. These are your first thoughts. I remember a job that I had before here I hated that job from day one because my boss was mean to me. It was just the way that I was approached. It was a bad example from the day I started. How you walk in and how do other people respond to you. Your first opinions of people sometimes can make or break a relationship or how you perceive somebody (TC).

TCRT-61   Step back and see the whole picture

I can take it to school. A teacher I had … talked about my work. Once you step back and you see where she was coming from, I kind of actually did understand once we sat down and talked … why she wanted us to be a certain way. But being a eight grader, it was definitely hard to understand why she wanted it that way. But thinking about that it's just makes you learn at a young age just how other people perceive you or perceive each other at that time. In the long run, I understand why she did it even though I don't agree with her (TC).

TCRT-62   Some people do better with freedom and responsibility.

College was interesting, I would have to say, college was different for me. It was not as structured as my high school. It was more, the teachers that I had in college were more laid-back. You had the freedom of doing your own schedule, doing your own thing, but in the meantime, they kind of ran your program, but they let you do what you needed to do. It was more

relaxing of the situation for me. And I think I do better in those types of situations. Rather than when someone is persistently telling me you have to do this or have to do that. Or you have to be here at a certain time. Once people started doing that, I kind of backed off a little that I didn't wanna be bothered with that. Everything goes downhill (TC).

TCRT-63   You can teach someone faster going to their mental level

But college was a good experience. It was a good experience about me learning how to read people and working with others. It's not all about just working with yourself and you have to be and work with others. So seeing how other people react and how you react to people, and how you can teach someone something, faster by going to their level is what I think you should do. You bring it down to their speed a little bit (TC).

TCRT-64   You can teach someone faster going to their physical level (sit/stand/squat).

TCRT-65   Some people learn slower, some people learn faster.

I remember when we were smaller kids, we would be sitting at our desks and teachers standing above us. Right then we're just awed by what they are saying to us. They need to kind of sit down with us. Pull up a chair … kneel so that you are a eye level, because if you're always staring down … it's haunting. But just being on their level, some just learn slower and some learn faster (TC).

TCRT-66   Ask people what way they learn better.

You try to do something your way first, and maybe you say this is not working for these kids or this group of adults, or whoever you're working with, then you need to switch it off and think, well maybe this will work. Or you can ask them what way they like to learn better. You have to adjust. You might have a class or a group of people that learns one way. So by asking them that question you find out much more rather than assuming (TC).

TCRT-67   Let people have options. Let people make choices.

Some teachers did go into the reading of the things, but I think it's more the way I look at things myself, because some people don't. I think it's more learning the way I grew up. You are the child and with the adult kind of thing, you do it and I never really liked that, someone always told you what to do. And me not liking that made me ask those questions to other people. Do you like to learn like this? Because that's how I felt when I was growing up in a particular situation, because of people telling me always

what to do. Now it's my chance to, and I let them have the option if possible. I let people have options, have their own choices (TC).

TCRT-68   Don't be afraid to come out and say, do you understand?

How often would your teacher look at you and say, if you have questions you need to ask now because if you don't understand like math, math is the perfect example, if you don't understand geometry, you are not going to understand trigonometry. If you're lost back on doing something simple, whatever, you're never going to understand what's next. So, a lot of that stuff even came from being back at school, because my teachers would say all the time, if you don't understand this week you will be lost next week. You need to have this to have this. So I kind of just knew it. I guess this is one of those things where if it was said to you every single day it's just embedded in your head (TC).

TCRT-69   Be able to adjust your style.

I was never trained to be a trainer so when I was put in the class, it was just things like, I watched the other trainers, but I was never formally trained on how to train. So it was just watch and see what they do and pick up things for yourself and adjust your style (TC).

TCRT-70   Ask questions, see if understanding is taking place. Do you know what I mean?

Like, how often they asked questions or how often do they say, is everybody still with me or does anybody have any questions. And how fast they move through a certain topic or when to cut off and see this one person struggling and they're behind when everybody else gets it (TC).

From mentors and peers.

TCRT-71   Learn from mentors.

Since I've been here, I've had very good mentors. We've discussed what the purpose is and what we really need to do and I think from their perspectives and individuals that I've personally had contact with it was stressed that we need to educate them about how they are affecting everything else and how I can assist them in being more successful (TC).

TCRT-72   Learn by watching others who know what to do.

I think I was helped by watching my TCs. Learning from them. It's kind of the only thing that you can go by if you're not a TC. So you were exposed to your technical coach. So I kind of learned a lot from, you know, all

technical coaches before I became one. So I think that might be a primary way that things were developed (TC).

TCRT-73   Defend your team.

I think, just from being there and having my technical coaches kind of stick up for me … So I think it's just something that I've said from day one from the moment I came in and it just kind of hit me one day that I'm going to do this. I'm going to defend my team and it actually clicked even more after a couple of months into the job (TC).

TCRT-74   Always be professional and courteous in getting your point across.

I had a great teacher in a previous company. I mean, she told me if you get stuck in a situation learn different ways to phrase it so that you're dealing as a professional and courteous, with some courteousness, but you're still getting your point across. So I learned a lot from her (TC).

TCRT-75   Be able to pick out different personalities.

TCRT-76   Know what type of person you are interacting with.

I called my mentor, and he said, probably the best way to deal with this type of person … and he would just pick their personalities and he knew with this type of person … he would just pick their personalities … he said he knew this was the type of person that you just have to be straightforward with and you just have to say what you have to say. Then, stand back and let whatever happens happen. And that was just the way that he had to deal with that person. No putting a spin out to make it seem better so they follow you. You just had to say it because you knew it to be true (TC).

TCRT-77   Show empathy when you've been in the same position and know the feeling.

I was thinking that when I first came to the floor as a CSR I would ask a lot of questions and that's eventually what my technical coach passed along to me, it was, you know the answer! You're giving me the answer before I'm telling it to you and you were right. So I've been in the same position and I know that feeling (TC).

TCRT-78   Be good at finding answers and pass along what you find.

We do know certain things, we are good at finding the answers. That's what you have to be able to do. Where you might say I'll have to get back to you on that one and then get on the phone and do whatever you do because there is no training. You don't sit in a room and say these are the

questions you will get in here and here are the answers to them. I think that's one of the things that is a little bit, misinterpreted. We pretty much have each other for a resource. When you walked over before, you may have noticed another person who is a technical coach. She had an issue, and we were discussing it. There is a lot of that going on. It's kind of what we do. We pass knowledge onto each other all the time (TC).

My experiences influence me.

TCRT-79   Experience is learning from trial and error

Ah… that's experience. Kitchen wisdom. Experience. Ah … learned from making errors. Learned from not having the direction. So we have to create the direction. We had to figure out what the correct workflow way was and a lot of it was just rely on …. common sense (TC).

TCRT-80   Be able to go back and say you were wrong.

TCRT-81   Be able to go back and correct your mistake; learn from your mistake

I wasn't the smartest one in the class, usually. But I wasn't out for like trying to be valedictorian so it was just easier to share that information. Ya know, I would catch someone struggling with a problem or question or ya know … and just share. Not always right. But also usually willing to say that I was wrong there and I think that's important for tech coaches too. To be able to go back to someone and say – ya know what, I gave you the wrong answer. Here's what I found out since then and let's go back and correct it if we can (TC).

TCRT-82   Your knowledge stems from your experience.

TCRT-83   Your experience is the root of your knowledge.

Well it stems from experience. My experience. Yes, my experience in the rule, I guess that really is the root of all of this, isn't it (TC)?

TCRT-84   A shared experience is where you bring what you know to support another.

TCRT-85   Shared experience is shared wisdom.

I guess it really wouldn't matter that my job is technical coach in what I'm going to do. I'm going to continue to do this. But that it is … I mean it is a shared experience. Ya know … what I can bring to a situation … I think is going to be a little bit different than what anyone else can bring to the situation. but I think that there's a universal shared wisdom type of thing. Ya know … I mean the ingredients for bread … generally the same. It's the

variations of the bread that … you have the same basic ingredients. I think there's the same basic stuff going on out there. Its just the variations, what works for different people. I might like wheat bread. You might like oat bread … but its bread (TC).

TCRT-86   Give choices of how to be successful from past experiences.

My theory is that I'm gonna share the information. Try to give them the benefit of the experience I've had. If they chose to take that knowledge and utilize it …great! Ya know … maybe we can avoid some poor outcomes. If they choose not to at least I've given them that information. I've given them those tools. So I think its better to share that information. Give them the choice to potentially be successful or not successful but with all the information that I can possibly give them. And then perhaps then they will take that information and share that. Because when I leave the floor and they still have questions they'll ask each other and a lot of times they'll say she told me this … ah ok and the other person will take it. So it just becomes like a grapevine type of thing. In the end I have to follow up and say this is what I said … it may have mutated but this is what I said. Like a recount (TC).

TCRT-87   Life is a teacher.

TCRT-88   Learn by observing.

I would just sit back and watch people most of the time you and would see how people get along. You would see what they liked what they don't like. I was always a person who sat back and watched people. I never really spoke out too much until I would really get aggravated about something or really wanted something really bad that's when I spoke out a lot. I was always a watcher I think. But I think you start off with just the type of personality you have and it brings everything out as you go through life. I think that's where it's originated from (TC).

TCRT-89   When you know someone you know what to expect.

You have to be observing. I just kind of watch you know, even if you sit with the same or surround yourself with the same people. Day after day after day, I'd think you get to know their habits. You know how they're going to respond. You know what this is the case that this is what they're going to say. I think that just comes to you though, because if you're surrounded by the same people every day you're going to know that. You just come to expect all these things (TC).

TCRT-90 If you pay close attention to people you can anticipate what's next.
If you pay close attention to people, and observe their actions, you know what to expect and you are anticipating what's going to come next and you will already have that answer. There's a lot of times on the floor though I'll anticipate, because I'm asked the same question, because it's maybe 10 times a day. So I walk up to the 11th person that day and they start asking me, I already know what the question is going to be because I've already anticipated it and I have an answer for them before they even finish their sentence, because I already know where they're going (TC).

TCRT-91 If you can anticipate what's next you will usually have the answer.

Yes, because I already know where they're going. If you pay close attention in your observance of these things that will always happen for you. And you will have already anticipated what's coming next, and you will already have the answer (TC).

TCRT-92 To learn, test the waters. Observe others. See what's happening.

Well, I think a lot of it, … a lot of what I did is test the waters for yourself. You observe everybody else around you and you just kind of go with it. I test the waters. I observe everybody around me. I go with it and it works (TC).

It would make me feel good, because I did it for myself. Like if I were able to do it on my own, I would not need somebody holding my hand along the process. I feel better about myself because I did it for myself (TC).

TCRT-93 Be an observer. Watch people before you open your mouth.

I think I just picked it up because I am more of an observer. I'm typically a watcher. I'll watch people before I talk. Just to know what type of person they are and whether I can open my mouth. So I'm more of an observer. I observe (TC).

TCRT-94 Learn from watching others.

Because I learned from watching others, I don't know. I don't know what you would call observing other people and taking what you want from them and applying it to your own life. I mean… is there a word for that, your life experiences? The way that you're raised (TC)?

TCRT-95 Put yourself into another's shoes or have them put on yours to learn perspective.

Maybe after a coaching session, if you felt there was anxiety … just saying, can we get together? And then putting that person in my shoes and say, now pretend I was you and I reacted to you this way. How would you react? Would you clam up? Would you not really say too much? Would you just answer the questions? How would you feel about that (TC)?

TCRT-96   Be aware of what you pick up from experiences.

TCRT-97   Give background information as needed when training others.

I am not a formally trained just picked it up on the experience of being brought in from ground level and when I say ground level, I mean the ground level. We had very good instructors and we always had them as resources. That was huge and. We had excellent resources in place. We were able to pick up and have a better understanding. I think that is where an experienced or more seasoned person benefits a new hire. I think we can give them in training all the time and the background that they need. Or we are doing catch up on the floor explaining why this is doing what it is doing (TC).

TCRT-98   Have structure but don't be limited by the structure.

I think it was important to have some type of structure, but not limited to that structure.

TCRT-99   Not every situation in life can be handled the exact same way twice in a row.

You just do not know. Not every situation in life can be handled the same way twice in a row. I don't think so. I think each situation you are provided in life has to be handled a different way. I don't think I could say that I've handled the same situation twice the same way (TC).

TCRT-100   Ask questions before you give answers; see what the person did first.

I ask the person, what steps did they take prior to signing up for help for this issue? Did you review a procedure? Did you look at benefits? Did you do anything? And if you did, what did you do? A lot of the times, it's nothing (TC).

The TC who had that person before me, actually asked those questions. What procedure's did you read? Did you look at benefits? did you check this, this, this, and this? You filled out the form. now I'll look at the form so what's your question? So, I learned from another TC (TC).

TCRT-101   Highlight important things you need to stand out.

It is a follow up. I need to go back to my desk with seven pieces of paper about the seven people I sat with and everything with a cloud or around it I follow up on. I have to follow up on it, a take away. That's another word, take away or follow up. I made the highlighting for myself. It's like I said, everybody has their own method of handling what's important. It's just fast and easy for me. Yes it's just fast and easy when I get back to my desk I put a highlighter around them so than they really stand out (TC).

TCRT-102   After doing something for 8 hours a day, 5 days a week, it becomes rote.

Oh yeah, I'm absolutely conscious of it. I know exactly what I'm doing. I guess there can be some unconscious moments, but if you do this five days a week, eight hours a day, just like anything it becomes rote (TC).

TCRT-103   Use the advice of what works, what's proven effective.

TCRT-104   Advice comes from trial and error.

TCRT-105   Use proven examples.

I think its more advice. Its what works! It's what worked, what's proven to be most effective in most cases and if you have extreme cases here are some of the other things that have been tried. So like proven examples or … and then you have people that come along and they still find other ways … more creative ways, something that hasn't been tried before (TC).

TCRT-106   Advice is in the experience.

It's in the experience I think, and then the experience is then written down and that sells books.

TCRT-107   Share what you know as you would recipes.

But I think it's like recipes. Ya know … everybody that wants to, can create their own recipe and just pass it down. Ya know … you go to a restaurant and you're like this is really good, do you have the recipe? Maybe they'll give you the recipe, maybe not. There are recipes that have been handed down and put into cookbooks (TC).

Evaluating – Appraising People

Reading people.

TCRT-108   Within 10 minutes with a person you should know what to do.

You know in the first 10 minutes of the session – what's going on? Where's your mind today? Are you worried about something? She would just vent and then we would get into the issues (TC).

TCRT-109   Know that a person may not ask the right question.

It's not really what they mean to get at. I know what I'm trying to get across. It's that they'll ask me a surface level question … but it's not really … really … what they need to know. It's like the precursor to finding out. Like I found that there's a lot of times people won't ask a question because they think they know something … but if I watch them with their process, they're missing something. But they don't know that they're missing it! So they don't always ask the right question. They don't always know to ask the question (TC).

TCRT-110   Watch how people respond.

For some people, it's just the way they respond. Some people respond better to the – look I've processed calls, I see what you're saying, I've had this before, this is what I've done. Other people don't want that. They don't care. They just want to know – what does the procedure say? What am I supposed to do with my call? And … it's trial and error when I'm dealing with a new person, I do a little bit of both (TC).

TCRT-111   Look at body language.

Well, look at the body language right off the bat. I mean banging on the keyboard. Focused attention on the computer not on me, who is next to them or … I'm concentrating on what I'm doing … it's a very – (sharp) fine. OK. Yep. OK. Thank you. … kinda way (TC).

TCRT-112   Be able to read people.

I think it's important to read people. Because they can have an urgent issue or a look of I need you right now or a look of I think I just have a verifying question. They kind of look at you or stand up a little bit and you know it's not that urgent, but if they're flailing their arms all around most likely they need you right at that second. Just the way that they look at you and that comes with, I think, just the experience of knowing the people (TC).

TCRT-113   Don't jump to conclusions, know what's going on before you act.

Maybe you're not pushing them enough and you need to push them more or maybe you're pushing them too much and you have to pull back a little bit. I would just you need to monitor to them or watch them a little bit before you do anything. If you jump in you may make too many conclusions

before you actually know what's going on it's not going to work for you because you already made the conclusion and you don't really know what it's supposed to be (TC).

TCRT-114   If you can, talk rather than send emails.

We just need to drop in and have a personal conversation instead of another e-mail going out saying this was happening here was going on here. So just kind of sharing because you're already out there and you kind of want to help the other person by letting them know what's happening (TC).

TCRT-115   If you're in a bad mood or frame of mind, take a short break. Clear your head.

Right then and there if it's a situation that I know it's going to ruin the rest of their day I'll tell them to get off the phone. If they take the next call … chances are it's going to be a bad call for them. So I let them go for a walk or we'll talk and I say well, what do you think happened with that call? Then once they say this is what I thought I did and I would say what I think (TC).

TCRT-116   People react differently to different tones of voice.

Experience, I think, just being a CSR and having situations with me being on the phones in other jobs, and I would be able to get to know how people would be able to react to your tone and to the way that you say something to them. You could be the nicest person in the world delivering the worst message, versus saying it mean and in other words getting the same message across in two different ways (TC).

TCRT-117   Show, don't tell. If you keep telling they won't get it in the long run.

I see a lot of people who don't really know where to go so. So they say yeah, they went there to just get the answer. They want to get the caller off the phone and don't want to be on hold. They just want us to give them the answer. Sometimes you can see when they're confused and you know the person and they keep asking the question over and over. You want to show them because, if you keep answering it they're not going to know in the long-run, where to actually get it (TC).

TCRT-118   Watch facial expressions.

I like to look at their facial expressions, because I can usually tell if you look at somebody, I can tell when they're lost. They kind of have that blank stare in their eye and they're looking at you with the head cocked to the side. Because they don't really get it and think they have an idea what

you're trying to say, you have to explain it in a different way until they understand it. It's usually what I do when I read people. Or they'll be like... if their looking at their computer screen with a blank stare on her face, I know they don't get. So you have to just re-explain yourself. I look a lot at their facial expressions (TC).

TCRT-119   Watch behaviors.

Some people, I think, when they don't get it, they get frustrated or excited almost to the point that they are losing their patience with you because they don't get it and I think they start to feel like … I'm not working very smart and they get frustrated, but with themselves. So it comes out to play on you because you're the person sitting there trying to explain it to them. So that's like one type of behavior that I see from time to time. Other people, when they don't get it, and if they're are a sincere person and they want to understand they just look at you and say I really don't get and then I just take the time to explain to them again. I'm really okay with that. They're the people more receptive to, I understand, I don't get it, and she's helping me; so they're not going to go on the defensive. And I think those are the only two behaviors that I really noticed (TC).

TCRT-120   If you pay close attention to people you can anticipate what's coming next.

You just come to expect all these things. I think it shows their nature. If you pay close attention to people and observe their actions, you know what to expect and you are anticipating what's going to come next and you will already have that answer. There's a lot of times on the floor though I'll anticipate, because I'm asked the same question, because it's maybe 10 times a day. So I walk up to the 11th person that day and they start asking me. I already know what the question is going to be because I've already anticipated it and I have an answer for them before they even finish their sentence because I already know where they're going (TC).

TCRT-121   If you can anticipate what's coming next you usually can have the answer.

Yes, because I already know where they're going. If you pay close attention in your observance of these things that will always happen for you. And you will have already anticipated what's coming next and you will already have the answer (TC).

TCRT-122   When communicating watch your speed and approach; know the person.

It goes back to reading the person. You know, you have to slow yourself down. Do you have to stay at a higher rate of speed, because you're going to lose them, because they lose interest or something like that (TC)?

TCRT-123   People ask questions for their own self-assurance.

Sometimes I don't ask them to explain it back to me; I think they normally just do. They do it to assure themselves that they know what they're saying because they don't want to get back on the phone with the member and sound like silly. Or they don't know what they're talking about. Or, so a lot of times, just for self-assurance, they will say it back to me to make sure that they did get it right when I told them. They want to be sure (TC).

TCRT-124   Reading people is a feeling; watch them and listen to them.

I just know they got it; maybe by their actions. I don't know it's a feeling. I just know they understand what I'm saying and some people will even say to you ooh, I've got it. And just by listening to them and watching them I know when they don't have it. So I'll ask them to walk me through it and how do I know they don't get it … by how they tell me that they've got it. Maybe it's their tone of voice. The way, they say, oh, I've got it. Because I know I've said that before. When somebody has explained something to me, and it like okay, I'm tired of them explaining it to me and I'll do say oh okay I've got it. So I guess maybe from me knowing that I've done that before and how they are doing it maybe I know they don't have it. So I ask them to walk me through to make sure they don't have it. And then I'll go on and give it to them again because they can't walk me through it. I think it's unconscious. It's just a feeling (TC).

TCRT-125   Be an observer. Watch people before you speak or act.

I think I just picked things up because I am more of an observer. … I'll watch people before I even open my mouth usually, just to know what type of person they are and whether I can open my mouth. So I'm more of an observer. I observe (TC).

How I go about reading people … almost I hate to say, by putting them on a scale of 1 to 10. The lower people I have to really be more patient. Drive them more. People on the scale close to a 10 are pretty self-sufficient and they don't need too much out of me, just little things. But being able to read that and know that … it's me actually being able to read people (TC).

TCRT-126   Make people feel important.

Be there for them. Follow through. Answer their questions. Give back to them. Make them feel important. Talk to them the way you would normally talk to another TC. Don't make them feel as if they are under you where you are above them or better than them. I don't believe in that at all (TC).

TCRT-127   Look at faces to see if people understand what is going on.

Well, I guess if you have a whole classroom of new hires … you could see the looks on faces and see if someone needs a different example or if they're not looking at you and reading instead. Well, they're probably learning by the reading it and they're not listening to me. If they have a question they'll probably raise their hands and ask. But I guess you can infer or that if they're not listening (TC).

TCRT-128   Be aware of the people around you.

I like to read people. So I try to always be aware of the individuals around me and see if I'm getting blank stares or if I can see that they are getting it. And then if I see that I'm getting blank stares, you know, you can try a different way (TC).

TCRT-129   Watch and observe people to learn about them.

You kind of have to read into that person a little more… maybe by noticing their sigh… or their body language… or the look on their face… if they're just looking at you, or they are not… I can tell it's somebody's not getting something, I just had it today. I know, when she is, because she'll go ahead, and she'll start typing away and shall process the call, while I'm there. If I'm watching her and she's staring at the screen and her fingers aren't moving I know she's not understanding me without her even saying it. So I try to explain it a different way until she gets it and she got it. But it just took a different way of explaining it, for her to hear it twice. Actually that was the case; she had to hear it twice (TC).

TCRT-130   Watch how you deliver your body language.

If they have an issue, make sure that they know they can come to you and they can discuss it. If I sat with you today and you say I really didn't like the way you reacted to me today. Okay, let's sit down and talk about it. How could I have reacted differently? What body language did you pick up of mine that I might have given inappropriately? What could you have done? I think it's just the identification, that communication. And where do we go from this point. How do we make this better between us? I know there's probably more, but… I think it's what initiated the incident (TC).

TCRT-131   Adjusting your tone of voice will effect how a person responds.

I found that if you adjust your tone to them they have a much easier time dealing with you than if you are serious. They don't know how to relate as

much, you know, dealing with how do they talk to you. If you walk over to them, are they afraid (TC)?

TCRT-132   Learn about a person's style from body language.

Do they feel like you're not there to help them or do they feel bad for asking the question? A lot of it is body language. I pick up a lot … you'll walk over and I'll sit right down and instead of standing I'll talk to you eye-to-eye (TC).

Well, I look a lot at body language, especially during a session. I think that's when we learn the most because you have half an hour to an hour with this one particular person. It's not just running around to their desk and answering their question. But I look at body language a lot. For example, one of my CSR's would sit back in the chair with hands folded through the whole entire session and just … okay okay okay. I could tell he wanted to do it his way only (TC).

TCRT-133   You can sense fear.

I get a sense sometimes that they are afraid to ask you a question because you think they are stupid or they'll even say this is a stupid question. I always say there are no stupid questions. I tell everybody who says that to me, but you can tell. So I guess I change the way I talk to them or deal with them in those cases (TC).

TCRT-134   You can feel what another person is feeling by watching them.

I told her why I thought she was asking more questions and I saw a lot of head nodding. So … so I think she really felt what I was feeling too. And I just ... I told her that she just really needs to go with what's in her head. Because most of the time when I come over there, she tells me the answer before she asks the question. And she asks a question and I repeat the same thing back to her. I kind of give her just the tip … take 10 seconds before you stand up and think about the answer. If you feel it's the right answer you've got from some place ... go with it. I'm starting to see a little bit of a decrease. That kind of the thing takes time, because once you lose that confident feeling it's hard to get it back (TC).

   Knowing people.

TCRT-135   Reading people comes from knowing people

In a way being able to read people just kind of comes to me by experience of getting to know people. You want to take that first impression of

somebody, you kind of take the first impression and try to fit it to your personality and everybody else's personality that you're working with (TC).

TCRT-136   You need to know people to work well with them.

Well, it is important! I wouldn't even have to think of it. You need to know people. You need to know them to work with them, if you don't you're not going to get very far. I knew this before I started here (TC).

TCRT-137   Get a feel for how people work, think, and act from others

…try to watch how they respond, to get a feel for people … we switch, we alternate teams and TCs would switch … and get together in a room with the other TCs and we would do like the out going and the in coming (TC).

TCRT-138   Sometimes people just need confirmation

So we'd say…we'd go down the list of people and we'd say – ok this person asks a lot of questions but their really quick, they're really good, they just want confirmation. They just want someone else to say; yep you're doing a good job. This person has no idea what they're doing, and really needs to go back and do a training. You're gonna spend all day with that person if you let them do that to you. And we kinda go down the list and it is like that concrete and that people aspect of it (TC).

TCRT-139   Beware of different personalities

For me it's valuable but I also tend to understand the differences between tech coaches. So one of the last times I switched I had an extraordinarily outgoing bubbly admittedly cannot tell somebody you're not doing this the right way person … would say to them; oh yeah that's good but you know next time you might want to do it a little differently. Can't come out and say – that's not what the procedure says. That's not what we should do. We should do it this way. So totally different approaches. Totally different personalities, so to me that review of people is … is immersed in that bubbly I want to be your friend type of thing. Where as I'm not quite that way. So I like to make my own judgments about people. (TC).

TCRT-140   Be there for your people at all times.

I coach them. I'm in emotional situations with them when I'm telling them ya know ... you have an error, its going to effect your quality. Its going to effect your metric. Perhaps your raise for the year. They cry. We get past it, so I mean that kinda interaction, I'm OK with. And it's because of the nature of the role. I don't think they tell you going into the tech coach role just how in the weeds you are with the people. So they can tell me things.

They can vent to me and I can't hold it against them. So we get more. We get more interaction. And it comes down to that you gotta know when they're gonna cry, when they're gonna get mad, when they're gonna need some space, and when they need someone to support them (TC).

TCRT-141   Get to know personalities.

If you had a new hire class, when they first come up on the floor I kind of all treat them the same until I get to know their personalities. Once I get to know their personalities I can kind of differentiate what they really need, because when you don't know anybody you can't really read what they want. So you start working with them a little bit to find out (TC).

TCRT-142   Once you know people and interact, opportunities appear.

Just by everyday talk; just getting to know me; by us getting to know each other; by interacting, once we start to interact there are many different opportunities between the two of us (TC).

TCRT-143   You can teach someone faster by going to their mental level.

College was a good experience. I was in educational background. It was a good experience about me learning how to read people, working with others. It's not all about just working with yourself, you have to be with others in education. So seeing how other people react and how you react to people and how you can teach someone something faster by going to their level is what I think you should do. You bring it down to their speed a little bit (TC).

TCRT-144   You can teach someone faster by going to their physical level.

Because if you're always staring down at them, they get that kind of oh my god, what's wrong feeling (TC).

TCRT-145   Some people learn slower and some learn faster; be able to adjust.

But just being on their level … they learned slower and some learn faster. You try to do something your way first, and maybe you say all this is not working for these people or this group of adults or whoever you're working with, then you need to switch it off and think, well maybe this will work (TC).

TCRT-146   Ask people what way they learn better

Or you can ask them what way they like to learn better. You have to adjust. You might have a class or a group of people that that learns one way. So by

asking them that question you find out much more rather than assuming that that they know it or don't know it (TC).

TCRT-147   Sometimes sharing personal feelings helps.

I hope this works, because if it doesn't you're gone basically. So at that point you want to push any more. I really want you to do this. Just tell me why can't you do this. And it's kind of like sharing feelings with some people sometimes. About how they're doing and sometimes they feel better and now they know that you felt that way about them. I didn't know that you felt that way or, I really tried just for you, just sharing personal feelings … I like you, I want to do well. Things like that kind of helps out a little bit (TC).

TCRT-148   Little conversations may lead to important questions that may not have been asked.

So I would go there say hi what's going on? How are you doing today? How is your day going or how was your weekend? Little conversations like that and sometimes you get into important questions that they may not have asked if you didn't stop by and say hello (TC).

TCRT-149   Know the balance of your team's talents.

You need to spend as much time with a high performer as you would with a low performer because if you don't, you're not going to know the balance of your team. You are not going to know everybody. I see a lot of people when they get a new team. They're saying oh, these people are not meeting their goals so you spend all your time with them. Well you don't know everybody on your team so maybe that high performer had a tough month, so, what happened to them and you don't know anything about them. So you want to, I would think if you're new to the team, to sit with them. Not really sit with everybody but get to know them (TC).

TCRT-150   To learn from a person or about a person, shadow them if you can.

I think I would just tell a person to shadow someone to get to know them. Once they find out who they will be working with, to sit there and just watch people. And shadow me or whoever their mentor would be at that point. And once they have that done that, they notice different personalities, they can talk to other people, other TCs, other managers and say, oh, this person is this way (TC).

TCRT-151   Don't take people for granted, even if you know them.

I wouldn't take anyone for granted. I think it's basically right to be very honest with you. You can't assume, so now you're asking those important detailed questions of what they can really do and how much they can do. And then you go into your day that way whether you are floor walking or doing coaching sessions (TC).

TCRT-152   Approach people based upon personality.

You learn about individuals on your team and what kind of personalities they have. You approach them without being upset or being defensive, because you don't want to have them get defensive. So, you need to first, learn your team, learn their personalities, know how to approach each member of the team, and approach it that way (TC).

TCRT-153   You need to build that personal bond with that person.

It just comes to me when I'm working with the same people all the time. I learned her whole life story, and I know that they're a delicate person. Or I know that they might be very emotional or very defensive. I have a different type of bond with every person on my team, everybody that I work. Everybody's a little bit different. I'm closer with some people that I am with other people. Some people are very very open with me. Some people may not be. I have some people on my team, they get emotional very easily. I have a person on my team that goes off the deep end very easily, but I know all that for myself. And I know that okay, I have this bond with this person and this is how they're going to react over here, and it is just something that you need to know for yourself. You need to learn for yourself in that way, you know how to be with that person, but I don't think that's something that somebody can show you or train you or teach you how to approach, because in this position you don't want to be like a robot or a machine. All of that has to come just from you. It can't come from anybody else (TC).

TCRT-154   If you don't know the person, you won't know how to react to them well.

If you don't know what their personality is you don't know how they react to different things. So that part of it would definitely be common sense. Now, how you approach them. You learn them with your own little checklist of this is the way you do things. But universally, everybody should know their teams (TC).

TCRT-155   Knowing your team makes coaching them easier.

Once you learn your team and you know how to approach each individual you are good, you have it down. Then it's just a matter of okay, where do they need the help and you just go and deliver it. So I don't really know if there is a step to pass that, I mean everything after that would just be your coaching them to be a better CSR, you know, using your own examples or saying this is how I would've done it (TC).

TCRT-156   Know the people you have to spend extra time with.

I learned my people out there, and I know, I feel where they're at. I don't even know how to explain this. I know which people it makes sense to and the people that it doesn't. I know the people that I have to spend extra time with, be more patient with than other people. And I can just ask…how are you doing? Good. Good you only had one issue that's good. I learned to know them so that I know what I need to give them. Does that make sense (TC)?

TCRT-157   Know that people learn differently.

Like I would have to show them the ropes and stuff. So I would know that people learn differently. I could just tell. You could tell (TC).

Well I guess I'm in the stages of trying to find out how she learns still. Does she learned by watching? Does she learned by repetition? Does she learn by reading? Does she learn by all three? You know, so finding out I was watching her and leading her into the direction I want her to go to. Like go to the procedures. Where are you going to go now? Well, does she learn from actually going in there and reading it? Or did I have to tell her and then she gets it? Or was it the combination of both? So it's like I'm still in the process of what makes it sink in (TC).

TCRT-158   Know what people are capable of and give them a push in the right direction.

I knew he knew where he needed to go. He just needed a push in the right direction. So I think it's just the experience of sitting with the same people week after week after week. Knowing what they're capable of and in this situation, he was very capable of providing me the answer without even asking me the question. He just needed a kick in the right direction (TC).

TCRT-159   Put yourself in another's shoes to get perspective.

Maybe after this session, if you felt there was anxiety … just saying, can we get together and then putting that person in my shoes. I'd say, now pretend I was you and I reacted to you this way. How would you react? Would you

clam up? Would you not really say too much? Would you just answer the questions. How would you feel about that (TC)?

TCRT-160   Know your confidence level and know their confidence level.

What is their confidence level? Absolutely. To know what their confidence level is ask how do they feel? That's one of the big questions you ask especially new hires or new people coming to your team. How confident are you? How comfortable are you? How comfortable are you in your new role? And you can tell by the response and see what's going on (TC).

TCRT-161   We all get frustrated.

Like if this guy doesn't do his work soon I'm going to strangle him! And why has this been going on for so long? And why am I wasting my time with him? I have new hires who have only been here for six months and really need my help and they do more legwork than he does. I mean, I would say those are a few of my feelings (TC).

TCR-162   Gear your help to what the person asks for, but listen and observe for other needs.

So, I always start off asking them what kind of help do they feel they need and then basically just gear it towards that. Or things that I've observed like the session that you have sat in on. Her problem was she's constantly asking questions about things she already knows and just doesn't feel confident in saying the answer. I know what I think maybe happened to her but I will always ask her first. I want to see clearly if we are on the same page or if it's something completely different than I thought. And then the help would then have to go a completely different route than you thought (TC).

TCRT-163   People struggle with their personal confidence.

You've got key people who ask a lot of questions. By the question, by what they tell you, and they tell you the answer to the question they're going to ask. They say, I'm just wanting to make sure I'm right. Or they say, I think it's this and it's right on the screen. They found it; you can see the answer is right in front of them. So I guess it is just the way to pass on you know, be confident. Go with what you feel. And we are always trying to instill confidence. Because a lot of them just feel like they don't ever know if they're giving the right information. They're never going to come across to their caller as confident unless they feel it (TC).

TCRT-164   Some people just need validation.

My goal was to get her to realize that she knew a lot of this. She was just looking for validation. She had had reviews where she had lower scores and that happened right before she started asking all of these floor questions. So that's probably what dropped her confidence level in herself, even though she was doing the same work and still dealing with the same issues (TC).

TCRT-165   Building relationships with people is worth the effort.

There's no way she doesn't know this because she repeated it back to me. So I knew she knew it. She just felt like she wanted to do it her way. Just reading that, I felt I had to go another approach, where I have to maybe develop a different type of relationship with this person for our sessions to be successful. And it took a long time with her. But now she has a nickname for me when I walked by. And she's very friendly. And now I sit down with her and she'll say okay, wait a minute, stop, let me ask you about that. So I know she's listening to me now. Which is a really good feeling. Yet I saw different things that she was doing. She was meeting her times. She was good in quality. She was meeting her customer service. So she was worth the effort and she's probably one of my biggest success stories (TC).

TCRT-166   Use open conversation, sit and talk with people and find out what they need and how you can help.

Sometimes, just open conversation … sometimes just to sit down and say let's just get off the phone for a half of an hour. Tell me what you're feeling. And I think that would be one of the things that I would pass on to do that with your teammates. It doesn't have to be for me so business-oriented from the very first one that you do with them. Because I think if you take just that half hour to sit and talk with them you learn so much more in every other session that follows. You know what they need and they are more successful (TC).

TCRT-167   TCs get a lot more personal issues to deal with because they know the person on a more human level. There is more of a relationship developed.

Even though that person was arrogant and I would say hey what's going on, why are you sitting in your chair like that? It's going past his desk and going, how are you today? Smile it's Friday! Something like that. I've learned that you need to build a friendship so that they trust you. It might be developing a relationship with every individual even though they can be so different from one another. And I think as a technical coach I've always for the most part seen you go to the manager for administrative things and

questions only if the TC is not around. But a lot of more personal issues they talk to the technical coach about. There is more of a relationship developed for the most part. I think getting to know each one of my CSR's. Talking to them other than they're just the body there that has to move these numbers (TC).

TCRT-168   Talking about something on a person's desk is a good way to get to know them.

It takes some time and it's not something you can accomplish in a day or two. But I find that I like being on the floor especially with somebody that's new. I'll ask them a question. I'll see pictures on their desk. I'll ask them if that's your daughter or son. Just stuff like that. Kind of look around at what they have on their desk or like the person ... you are very very organized. Or if you hear something from someone else, anything you need to start to have conversations with them. Pictures on the desk or a good one. They are very personal. They like to talk about those things or they wouldn't them on their desk (TC).

TCRT-169   Lean about the person from the questions he or she asks.

I know them from floor walking and just from the questions that they ask. Because they'll ask a question and you're seeing where they've already looked. You are seeing how they're navigating. You are seeing their computer skills. You're seeing everything all at once. I guess it would be just getting to know that individual and establishing good rapport with them. I think that's probably the key to success, if were going to be successful in coaching them (TC).

TCRT-170   Just show people you care about them.

Just showing somebody, you know, that you care about them, besides just what they're doing at work … Yes, they're here to do a good job. But you realize other things may affect that and that you are willing to try to help and care, based upon what they may be going through (TC).

TCRT-171   Don't start someone's day off bad news.

When I approach a lot of my team in the morning if I know there's something big going on I might say how are you doing. Instead of me walking up and saying okay, here's your up-to-date stats. You're call time is really terrible. What am I doing to them for the rest of the day? If they're already feeling bad it's the first thing I'm throwing at them. They know about it and some point in the day I will be mentioning it and we will be working on it. But to start the day off like that! It's not going to help them

get their times down. They are going to be miserable and not want to take calls. And it's going to make it worse (TC).

Instilling – Sharing What Works Over Time; Influencing Others

   Building confidence.

TCRT-172   Rules-of-thumb instill confidence.

Rules-of-thumb instill confidence because all the little bits of advice that we pass on, if they pick it up and it works, it does, it definitely brings out confidence. And in me, oh yeah, you've done something that works, you see the light go off and it makes you more confident (TC).

TCRT-173   People ask questions for their own self-assurance.

Sometimes I don't ask them to explain it back to me. I think they normally just do they do it to assure themselves that they know what they're saying. Because they don't want to get back on the phone with the customer and sound like silly. Or they don't know what they're talking about. Or, so a lot of times, just for self-assurance, they will say it back to me to make sure that they did get it right when I told them. They want to be sure (TC).

TCRT-174   Help build people's confidence at all times.

Oh yeah. A lot of people, their confidence isn't real high. So before they get on the phone and they tell this customer, they're going to say back to you what you said to them just to assure themselves that they understand it (TC).

I don't really think that's reading people, because everybody does that. It's more of like an assurance thing, like okay, they got it and plus, when you ask them, so what are you going to check off? They are giving you the answer, so you're not reading them or you're not telling them how to do it. They are actually giving you the answer and like yeah, I got it (TC).

TCRT-175   No matter what, stay calm and collected.

It was an unhappy person and I just stayed very calm and collected. See the thing is I have CSR's, who don't have the confidence. You have to get on the phone and talk to these people. Like you're giving them the opportunity to not trust you or to not believe you or to undermine what you're telling them (TC).

TCRT-176   Have confidence and faith in what you say. People will hear it.

I think that you have to have confidence as a person. You have the confidence somewhat. Be confident in yourself, which then you display through your voice tone. You definitely have to be confident and have faith in what you're telling people that you are right, because if you don't have that, they are never going to have that faith or that respect in you that you are giving them the correct answer (TC).

TCRT-177   If you are confident your voice will display that.

If you're not a confident person people will not always trust what you're telling them over the phone. I am confident and I have faith in myself and in what I'm telling these people. So I get on knowing that I have this, it is just me. It is already displayed in my voice. I don't have to work towards that. So, that really wouldn't be a common sense thing, because I understand that not everybody is like that. Not everybody has that quality (TC).

TCRT-178   Put yourself out there, take chances, don't second-guess yourself.

I think if you want it bad enough, that's one of those things where you yourself as a person want to have confidence in yourself. And you want to be that better person you need to take this step. You need to put yourself out there and take chances, and not second-guess yourself and if you can't do that, that's not something you'll ever have (TC).

TCRT-179   Some things like building confidence can't be easily taught.

See there's a lot of things you can't teach either, like a lot of people will have problems with confidence. And that's not something you can coach to and all you can do is tell them believe in yourself or you know trust yourself. You have the information right there. You do know what you're doing. But if that person has never been a confident person because of what ever reason, that's not something you can change in a person. Do you know what I mean? That's more like, that's just how they are. They are not a confident person, then that's who they are (TC).

TCRT-180   You can try until you're blue in the face if they don't want to change, they won't.

They are not confident. That would be the first step, you know, accepting the fact that the person needs to work on their confidence, the fact that they're not a confident person and they must want to be confident. You can coach them until you're blue in the face and if they don't want to change they are not going to (TC).

TCRT-181   Building confidence takes time.

Building confidence is when they come over and ask or I go over and they ask me question and I'll actually have them answer the question. Nine out of 10 times, their answer is correct. And I'll make them feel good about it and say, see, you don't even need me here. You answered that yourself. If you just put a little more time and thought into it you could have answered that question yourself. Building their confidence that way takes a while, but eventually it does (TC).

TCRT-182   Be confident in your own skills, pull it from the inside out.

In order to get them beyond being stopped in their tracks I have them walk through the whole process. I can get them through almost the whole process and just give them reassurance and say yes you are correct. You were interpreting the information right. We are good to go. That's where I want to get them to. And once I get them past the reassurance phase. Why even ask them the question … they know the answer. You know you just need to be more confident in your own skills. Pull it from the inside out (TC).

TCRT-183   Find out how far a person went to prepare for your help.

Again…it's the same thing. It's finding out how far did they go. How far they can go. Did they just get overwhelmed by the situation?   So we try to get them more comfortable in the steps as they are going through them (TC).

TCRT-184   Use positive reinforcement and real-time feedback.

She was just looking for additional confidence again as well. And they do like to hear that positive reinforcement. That yeah, you are correct, and you're good to go. It seems like sometimes, we tend to give too much negative or post feedback. I like to give more of real-time feedback. But … the first would have to be to develop their confidence with positive reinforcement. I think that covers a lot because the positive reinforcement can come in so many different ways. It can just come as a yes, you interpreted that particular procedure correctly. Yes, you came to the end result of the call. Yes, your quality metrics are outstanding, and you are about where you need to be (TC).

TCRT-185   Just ask if a person can handle the job to test confidence.

I usually don't take how they feel for granted, I think. I think I tend to ask that question a lot during my sessions. How do you feel about that? You feel comfortable with the decision that we are making? They have to

ultimately understand why we are doing what we're doing. I never really want to force how I feel on them. So they've got to give me their input as well. So I don't take that for granted. If they tell me that they are feeling good and they are feeling better. Then I'll ask them, do you feel more confident in processing because your skills are there. Yes, they're confident in their skills. Yes, confident in their processing. Yes, they feel if they came up with the situation or alternate situation they would be able to handle it. They don't necessarily need me anymore. Not that they don't need me. They don't need that hour per week, or whatever we have set up (TC).

TCRT-186   Don't walk away until you feel confident in the person.

I'm feeling pretty confident that she is going to walk away knowing what we've covered. I'm confident that she knows what we've covered and that she is going to get it. I think that is the biggest thing. I'm not going to walk away until I am confident that they actually get. Or if I see they are struggling with one thing; listen, it seems like you're struggling. Why don't we… the next time you get that situation just sign up, let me know. I'll come back, I will sit with you, and we will make sure that you truly truly understand (TC).

TCRT-187   Always trust your judgment: be confident.

You can relate that to over analyzing. Yeah you can overanalyze something. A lot of the people don't trust their own judgment. So you have to trust your judgment, there cannot be a rule for every single call that comes through. We get thousands of calls a day. So judgment has to come in at some point and they have a hard time trusting their judgment, even tenured staff (TC).

TCRT-188   Trust yourself. You come to a point where you need to make a judgment call.

You can sign up for help with every single call. Everything would grind to a halt. So the technical coaches are tasked with many tasks, and you come to the point where you have to make a judgment call. You have to trust yourself. I learned that early on (TC).

TCRT-189   Try to instill confidence in others.

Again, I always tell them always just trust yourself. Sometimes, they refuse to trust themselves. So, I just try to instill that in them (TC).

If I we're starting as a brand new TC or a backup TC coming into the position, one of the things that I noticed is that we have to get people to be

confident and to trust their judgment, so I would go to and ask, how do I do this (TC)?

TCRT-190   Give positive feedback to build confidence.

Really, it's all attitude. You have to be really upbeat.   You have to give them really good positive feedback time and time again. You have to show them hard statistics, that you've met numbers here, here, here, and here and your quality is good (TC).

TCRT-191   If you want people to be more confident use 'trust your judgment.'

It's something that works. It's something that produces the desired outcome you want. If you want people to take more ownership, use pushback. If you want people to be more confident, use trust your judgment. If you want people to meet production, don't overanalyze. These are some things that produce the desired outcomes (TC).

TCRT-192   Confidence is being comfortable in what you do.

What is their confidence level? To know what their confidence level is ask how do they feel? That's one of the big questions you ask especially new hires or new people coming to your team.   How confident are you? How comfortable are you? How comfortable are you in your new role? And you can tell by the response and see what's going on (TC).

TCRT-193   Know your material if you want people to be confident in you.

Making sure when you're training a training class, making sure you know that material 100%, because if you can't pass it along, the people that you're passing it to won't trust you. They may not think that you know what you're talking about. Everything you say after that, once they've made that decision, everything you say after that isn't going to be valid and it's not going to mean anything to them (TC).

TCRT-194   Be totally prepared at all times.

Even if I'm doing a 5-10 minute group session with my team just to pass on something that's changed or something new that's coming out, I take and read it 10 times and make sure I don't even have to look at the paper to talk to them about it. Because if you don't have that confidence when you're giving information, they won't have confidence in you (TC).

TCRT-195   Never pretend to know what you don't know.

I would never stand there and pretend that I do know when I don't. I will say I don't know that (TC).

TCRT-196   You won't come across as confident unless you feel confident.

We are always trying to instill confidence , because a lot of them just feel like they don't ever know if they're giving the right information. They're never going to come across to their caller as confident unless they feel it (TC).

TCRT-197   You will know if it is right or wrong by how it feels.

You're going to be in situations where you may not have been here before, but you will know by how it feels. You will know if it's wrong or you will know if it's right (TC).

TCRT-198   Talking about successes right away builds confidence

Oh, they tell you about it right away; I'm not asking as many questions anymore! They will definitely tell you. And then they start letting you know. I didn't ask that many questions today. I only asked you three questions. They actually do little tick marks and put down how many questions they asked for the day and tell you I only asked three or yesterday I asked to 10. So they do let you know (TC).

TCRT-199   When you lose your confidence it is hard to get it back.

I told her why I thought she was asking more questions and I saw a lot of head nodding. So … so I think she really felt what I was feeling too. And I just ... I told her that she just really needs to go with what's in her head. Because most of the time when I come over there, she tells me the answer before she asks the question. And she asks a question and I repeat the same thing back to her. I kind of give her just the tip … take 10 seconds before you stand up and think about the answer. If you feel it's the right answer you've got from some place ... go with it. I'm starting to see a little bit of a decrease. That kind of the thing takes time, because once you lose that confident feeling it's hard to get it back (TC).

TCRT-200   In the beginning you just need to hear you are doing the right thing.

Well, I was always so concerned with my quality scores, that I just wanted someone to say, OK, yes. You found the right answer, and that's what you should say on the phone. I guess it is that confidence, especially when you first come to the floor (TC).

TCRT-201   Use a lot of positive reinforcement with each contact with a person.

A lot of positive reinforcement, you need to walk over to their desk and say great job. And say to them, you know, you gave this answer and you did it! They need a lot of positive feedback (TC).

TCRT-202   Most people already know the answer. Go with your gut.

I use that a lot. You have to be careful of the people that you use it with. Because some people will get you and say there is no way I'm going with my gut because they are that unconfident. I think, I say it because it's more personal. It's not so much that I'm standing there, this is the program. This is how to use it. This is where to go. Because sometimes that's the answer they hear from absolutely everybody. It's a textbook answer. And they're tired of hearing about it. And I say go with your gut. And they know that I'm telling them that you already know the answer. And I'm telling them that I know that they are knowledgeable, and that they're smart (TC).

TCRT-203   Lack of confidence stems from not knowing where to look for needed information.

I go with my gut because it's personal and because a person might not have the confidence to do that. It's because they might not know where to look for information because they might not have been shown where to look (TC).

TCRT-204   If you believe something—100%—you pass it on with confidence.

They know that I know the bottom line and it's that were here to do our job and we have to make these numbers to serve our customers better. I repeat that over and over and over about our customers. So they know that I really believe that. I say it all the time. I guess that's it. I think if you believe something 100% you pass it on … They know that I know it's the bottom line and I felt that I've been able to pass that on to them (TC).

Problem solving.

TCRT-205   Share and be able to go back and admit and correct your mistakes.

I would catch someone struggling with a problem or question or … and just share. Not always right, but also usually willing to say that I was wrong there. And I think that's important for tech coaches too. To be able to go back to someone and say – ya know what; I gave you the wrong answer. Here's what I found out since then and let's go back and correct it if we can (TC).

TCRT-206   Remember the problem is either the process or the person.

Ummmm…well what else do you think is getting in the way? Do you think it could be the amount of time you're spending on your cell phone? Because we've set up all of these factors that you've said are your barriers … you're still not making it, why? Then comment – OK all of these things that I'm saying the problem is … not really the problem. So its gotta be the behavior. My thinking … this is my own thinking … its either the process or the person. So if they not meeting the metric it's either the process or the person (TC).

Ummmm…No nothing is actually surprising. It makes sense…that is…that is a lot of what I do. Like the whole Japanese way of business…fix the problem…then worry about who did it. Later deal with who did it and what needs to be done. Fix the problem now (TC).

TCRT-207   Make sure you have enough time and resources in the day to do your work.

Hahahaha…have enough time in the day to solve everything which needs to be solved. The resources, required to do it … Really the challenge is the time … Otherwise it would be perfect – ideal (TC).

TCRT-208   Ask for help the problem won't get better and may even get worse.

Yeah, one of my typical people, you think they're going to go one way with things then they tell you another problem arises and something else happens. It's one of those things that we have to constantly watch, if it's not her times than it might be her quality. It's either her quality or her time. I put myself out there with her, and mostly with a lot of people, because if you need me you need to ask those questions you need to. You need to find me or find a manager or do something, because if you don't ask, the problem is not going to get any better and is probably going to get worse (TC).

TCRT-209   If someone doesn't want help, what you do usually won't matter.

Definitely I do think that's a rule, because especially when you sit down with someone like that. They already know what type of situation they're in. And you will say this is what you need to do in order for you to have a job and this is what I can do to help you but if you're not willing to do it, my help is not going to do it for you. So you kind of put it back in their way in their lap of basically (TC).

TCRT-210   Set a goal of what you need to do in any meeting or session with people.

TCRT-211   The end result all comes back to how you and the other person interacted.

Depending on the person is how much you have to push them to get them to where you want them to be. If you push them too much sometimes they go over the edge a lot quicker than they would if you didn't push them that much. I know you sat with me on one of my sessions and I just let her go sometimes, but I have to reel her back in sometimes, because the subject gets off totally to a different agenda basically. I always try to set a goal of what I need to get done in that session. As long as that goal is done in the timeframe that I have with her then I will let her or whoever talk or say or do whatever they want. Because I know they need some time to vent themselves, because I need time to vent myself sometimes, with my manager, one of my peers. It all comes back to how that person is and how they interact with you in the reading of them (TC).

TCRT-212   Test for understanding by asking, do you really understand this?

Step back and say, do you really understand this or do you need a coaching session or a side by side where we can go over each step? Or is this something I can explain while the caller is on hold? Just try to evaluate them and see where they're are with that. If they're really confused I'll probably give them the answer. At that particular point, and later on during the day or the next day or sometime during that week, I would schedule a session with them and say OK, let's get that example. And we'll go over that example, and so they have a better understanding of it because now we did it together basically. I do it that way (TC).

TCRT-213   Bring them back to reality. Ask what's wrong? Where can we go from here?

There is one person … it seems like she is frustrated and as soon as she hears someone asking a question … she whales, her arms up and you know what it's about. And I go up to her and ask what's wrong and she goes, I don't understand. And I go well, what are they asking you, and she goes, I don't know. I don't know what they are asking me. You just gotta bring them back. Make them get on the phone with that person and ask them this question and if they say no to this ask this or whatever they say, you need to probe them for the information. So when we tried to coach them you have to make them say the information to the caller and sometimes they are hesitant. Because if they don't get it well then I say, what else can I tell you? Or how else can I better explain it … But just, you have to bring them back to reality a little asking those questions. What's wrong? Where can we go from here? Then figure it out at that point (TC).

TCRT-214   You can get a lot from people by seeing them in the lunchroom sometimes or when they're on break or just talking with them.

It's like if you are on the floor, and you are talking to them and they are not on a phone call, say hey, how are you doing what's going on? How is your day going? How are your phone calls? Are there any issues that you have or anything like that? You can get a lot from people by seeing them in the lunchroom sometimes or when they're on break, versus just sitting with some people (TC).

TCRT-215   When people can't figure things out, start from the beginning.

Well, those come up … issues come up. Then I find it and that's a big process, because the CSR will do the research and when they can't figure it out, I'd start from the beginning, just as if I had just gotten a phone call (TC).

TCRT-216   Always use all of your resources available.

Tough question. Well, maybe I would have said the same thing. The only common sense thing there would be to use all of your resources, make sure you're reading them correctly, which maybe after a while, if they had done that they would have gotten it. That was a tough one (TC).

TCRT-217   Most people don't like to be told they are not doing well, adjust your delivery.

…because as human beings, because this is pretty generally speaking, most people don't like it when somebody comes to them and say hey, you're kind of not doing so great here (TC).

TCRT-218   People may need to convince themselves of needing help or needing to change.

They don't realize it until they hear it from themselves, and they hear it for themselves then, it's like a smack in the face. You can't debate it. It's right there. You just heard it that to me is a very common sense item, because until it is smacking you in the face. It can be anything any day of your life. So, it smacks you in the face and you say, wow. It's not going to change, because you don't think the problem exists. You don't think there's a problem until the problem smacks you in the face and now you're like oh, I do have to change! To me that's a common sense thing (TC).

TCRT-219   To help a person improve their quality, make them aware of their problem.

For a TC to help a person improve their quality they should ... they should, or they need to make the CSR aware of where the problem is. And one of those ways would be, yes, one of those ways would be to have them listen to themselves (TC).

TCRT-220   Listen to seasoned successful people for examples and ideas.

Listen to a seasoned CSR, listen to someone who's been here forever and has high-quality. They don't even have to have a conversation. I think that with the CSR just sitting there and listening to this other person it would be going through their head oh if this were me, I would have said it this way, or I would've gone here or I would have or I would've told her this. So they are already going through their heads listening to well this is what I would've done and by listening to her I learned xyz, and she's has a 100% quality. So maybe I'll start trying it this way instead (TC).

TCRT-221   Some things—like building confidence—can't be taught easily.

See there's a lot of things you can't teach either. Like a lot of people will have problems with confidence. And that's not something you can coach to and all you can do is tell them believe in yourself or you know trust yourself. You have the information right there. You do know what you're doing. But if that person has never been a competent person because of what ever reason that's not something you can change. Do you know what I mean? That's more like, that's just how they are. They are not a competent person, and that's who they are (TC).

TCRT-222   Pass on, teach, and give away what you know.

To make you a TC: the people come first. So if they have a problem, they come first … Get the people the information that they need. If you don't know, I reach out to somebody to find it out to get it back to them. That's one of the first things that you have to do and to pass your knowledge to them. Teach them what you know. Give them what you know. Those are the top two. Is the people and taking care of the people and for filling their needs and helping them be better by giving them what you know (TC).

TCRT-223   Test for understanding by having someone actually walk back through it.

Yes, and actually, that's one I've been thinking about. Walk me through this because I know some people when they have a problem and I said and I walked him through it sometimes they won't retain it until they have to actually walked back through it. It's almost like someone can tell you how to do something but until you actually do it or even verbalize how you would do it you don't comprehend it. So usually before I leave the chair side I want them to walk me through it so that I know they understand it and they've got it (TC).

TCRT-224   If they need to, have them take notes for future reference.

I think that comes from me answering a question and then going back to that same person the next day and answering the same question that I've answered the day before. I don't like to waste time. If I make sure that they they've got it before I leave, I know they're not going to ask me the same question tomorrow. Which they might still, but at least the first time they walked me through it, I knew they could do it. So I felt comfortable with that. If I have to do it again that's OK too. The third time then I ask them to take notes so they can refer back to the notes (TC).

TCRT-225   Take the initiative to solve your problem before you call me.

They need to take the initiative to read through the procedure and if they don't understand it, if they run into a problem, then that's where I should come in to play, rather than at the very beginning. They don't even take the initiative to read the procedure. So they want me to start at the very beginning with them and analyze their call and then go right to the procedure and read it to them and show them where the answer is (TC).

TCRT-226   Look for patterns. When troubleshooting or problem solving look for patterns.

We have tried observing him process without saying a word, just to see how he thinks and how we would do things correctly, of course to how he does them incorrectly. Several people have done that … We try to see a pattern. And if there something that he's not getting in this pattern we can go over it more with him or we can find a different way. (TC).

TCRT-227   Take notes and use notes.

He needs to see it in black-and-white… then he forgets he has the notes, because he goes directly to the procedure again and he doesn't look at his notes. So what's the point of taking a note if you don't look at it (TC).

TCRT-228   Tell a person why something is as it is.

But I gotta get him to the why. Why is this happening? Because procedures tell you how, but they don't tell you why (TC).

TCRT-229   Listen to people and don't interrupt.

You know, just listen to what they have to say before you interrupt. I always try to do that. Always. Just hear them out. I guess it's like that call… don't step over it. Because most of the time when they're asking a question they're are going to answer themselves (TC).

TCRT-230   Listen to them; they may answer their own questions for you.

Ⅰ From my own personal experiences just working with that team they'll just
talk and this is my problem … then, oh never mind! That's when they get.
Never mind! Never mind! I know what I did. I know what I did. And I'm
like, I know. I know. It's all right. Listen to them. They may end up
answering their own question (TC).

TCRT-231   Always test yourself and others for understanding.

Ⅰ Test for understanding. I know I do that a lot. Do you know what I mean
(TC)?

TCRT-232   Try to remove barriers limiting success.

Ⅰ Conflict resolution or how to solve the issues. How do we remove our
barriers, because they would be barriers? So, barrier removal would be
working with your team if you identify something like that. Maybe that
person's not going to be successful. Maybe none of us would be successful.
We have to give the person we are coaching the benefit of the doubt. We
are giving them something not nothing! And we're making every attempt in
the world to remove that barrier from them (TC).

TCRT-233   Come up with creative ways to solve new problems.

Ⅰ I think that's part of it. Just that each situation is different and it is very
difficult to have a condition to cover every single call that we can ever get.
So as they come in different things, new things, we just have to come up
with an eventful way of handling it. The problem for ourselves … come up
with a creative solution (TC).

TCRT-234   Use the past to map out the future possibilities to solve familiar problems.

Ⅰ Well at least we would have a map or something from this situation that we
learned. And we'd probably just go down the same path with a similar
situation. That's the nice thing. Once you have that situation, if you did
something of the same … you'd have that previous experience to go by
(TC).

TCRT-235   Think outside the box and not about just what is in front of you.

Ⅰ I tell them you've got to get inside the person's head … so that's like a best
practice to try to think outside the box. Don't think what's in front of you;
think about what they're after (TC).

TCRT-236   Sometimes you need to take the problem away.

One of the things that person had a real problem with was, we call them hotkeys and not using the mouse. And it's very important not to use your mouse because it slows you down. So I just would constantly helped with the hotkeys. I tried to get that person to be better, but … would not get rid of the mouse, I actually ended up taking the mouse out of the computer, but it helped to learn quickly. It was one of those things. So I guess that's one just very generic example of passing on some knowledge (TC).

TCRT-237   When you don't always have the answers, be good at finding the answers.

I think the one thing that gets misinterpreted by people for not in the role, is that all you do is walk around and answer questions and they think that is your job. And really the job is barrier removal and being able to escalate things, issues that come up and finding answers. It's not so much just walking up and down the aisle and saying, if you have a question just raise your hand.   We are supposed to be getting them the answers. We don't always have the answers. We do know certain things; we are good at finding the answers. That's what you have to be able to do (TC).

TCRT-238   Exhaust every avenue you have to answers to questions.

Yeah, I have a lot of gray areas. A lot more gray areas than others. Because when I sit there I'm so used to like these crazy scenarios that pop up and we need an answer on. Very rarely… do I get a question of, I don't know how to do this. I rarely ever… once in a very long time. Usually if they have a question I can already assume it's something that's probably a problem or a gray area because they never say, how do you do this or where do I find this? Usually they know and they are already here to ask the question. They basically have exhausted every avenue that they know (TC).

TCRT-239   Gray areas usually narrow down to two different scenarios.

I guess it's not so much that it's new… to me… it's that it's a gray area. They are stuck in like this gray area where they can either go either way. They usually narrow it down to like two different ways that they can go, but they usually narrow it down to two different scenarios. Or I help them narrow it down and I just think outside the box, at times and basically reason, what sounds the best? What is the most logical way (TC)?

TCRT-240   My job is thinking outside the box.

You have to be somebody who can think outside the box. I found that out. I did not know that before I took the job. Because a lot of our job is, we are

given a problem, and we have to find solutions to that problem and come up with an action plan. We're going to, for instance, raise quality You have to think outside the box, what would be making scores low. Is it that they are truly not giving customer service? Or are they so upset with the responses? Is it just monotonous for them and they think I'm not getting a good score, so they don't try? So it's a lot of not reading numbers on paper. We can see what their quality is, but why (TC).

TCRT-241   Ask what kind of help do you think you need. It saves time.

I started off by asking what kind of help today think they need because you gain a lot from what those answers are … So if you don't ask them what help they need you are not going to learn as much about how to help that particular person. You're going to give them a list of things. And they're going to take it, because just like anything else from their manager or they're going to take it and say OK and maybe not be able to do anything with it (TC).

TCRT-242   Gear your help to what the person asks for but listen and observe for other needs.

So, I always start off asking them what kind of help do they feel they need and then basically just gear it towards that or things that I've observed like in that session that you have sat in on. Her problem was she's constantly asking questions about thing she already knows. And just doesn't feel confident in saying. I know what I think maybe happened to her. But I will always ask her first. I want to see early if we are on the same page or if it's something completely different than I thought. And the session would then have to go a completely different route and you thought (TC).

TCRT-243   Figure out what works best for them.

I will always schedule two when they may need a session, and if the numbers go up, and you realize now that they are okay not necessarily. I usually always schedule a follow up session with them. Did you try anything that we talked about? Did it help you? Did it not help you? Along the way did you find something else that worked for you? You see that a lot. You tell them try this here. Then put a little spin on it and it works better for them, like with working your open calls, which are calls that could not be resolved when they were on the phone. That, they kind of have to figure out their own way; what works best for them to work those calls, but still stay within their times. So I usually always do a follow up (TC).

TCRT-244   You need to recognize the struggle people go through.

We see what a CSR is struggling with. They might come in, in the morning and get a 50 out of a hundred on a quality and they will talk about it all day. You know, it's bothering them. A lot of that is missed, with people who don't spend the time with a CSR. We see the struggle they go through (TC).

TCRT-245   People need to be treated in an individualized way.

Another person who was also a new hire and she was struggling meeting her times. And so I sat down and did a session and gave her tips on using hotkeys to get her through navigating the system more quickly. Let's take just one system and practice just the hotkeys from that system and then the next session, we did another one. By that time we had mastered the first now we did another one and she didn't have to focus on that first one. She didn't have to give it any thought anymore because she was getting really good with the hotkeys. And now she's beating her times and she's well under her times. So that comes from, you don't know that some people you can give all of those tips to and they will start using them and be fine with them. But that was something more individualized with her. It felt good. It felt like I actually uncovered what her individual need was. And so it makes you feel good when you give them something and it works (TC).

TCRT-246   Ask WHY five times to get to the root of the problem.

Well of course, you know that I asked them to tell me what they're feeling about the job the they're doing. Do they think they're doing well? They are just frustrated and then everything else… it's kind of just their feelings about the job they're doing. And then I might ask them what do you think you're lacking in? Why do you feel that you can't do this? And this is something that I had passed on to me from another technical coach, who went to this course. It's called the five why's. And you start up asking a question and one of the examples that they had in class. Not so much business related but it was. Why did the Titanic sink? And someone said, because they hit an iceberg. And someone said why. Because they were traveling fast. And someone asked why were they traveling too fast. And by the fifth, why, you actually got to the root of the problem. Which was they were trying to push the ship to break records to make money. And that's really why the Titanic sank. And it works. And I use that a lot (TC).

TCRT-247   Know that most people are afraid to say they just don't know what to do; ...all because they don't want people to see them as not knowing the answers.

I think we feel that we have to come up with all the answers all the time because that's our job. We're there to help people. And we can't help them

if we don't know an answer to their problems. And I think people are so afraid to say … now I just don't know where to go with this at this point (TC).

Why? Because, you don't want anybody to see you as not knowing all the answers, because then you think that they will look down on you (TC).

TCRT-248   Remove all barriers from a person's path.

…are there any barriers that I can remove, which opens up the table for someone to say I have this. And I don't know I'm not really sure where to go with it. She is very very good at that and some people aren't. They will say this is what you need to accomplish. Okay, go ahead through your day and get it done. Not realizing that sometimes there are just issues that not everybody is going to know how to solve them (TC).

TCRT-249   Always get to know the person to get to the root of the problem.

Get to know your people. To me, it's probably the most important, because I don't think that you can really get to the root of the problem unless you really know what's going on with that person (TC).

TCRT-250   Don't be surprised if the problem is more personal than business…because a lot of times problems can be more personal than business.

TCRT-251   Realize people tend to bring home issues to work and work issues to home.

Because people you know, they have a tendency of no matter whether they're at work, they put their home life in or vice versa. You bring work home because basically you can't separate the two. People are human beings, and if they come to work upset or angry it's emotional. You can't just turn it off. You might get sidetracked and hopefully work will take your mind off of it. But it's still there (TC).

Knowing – Calling Up My Insight and Inspiration

TCRT-252   Rules-of-thumb are timeless.

They are timeless; it's like you always remember them. They are timeless. It's like you always remember them. You carry them. Just like even something I saw my mother do, I'm going to do. And I'm sure when my child has a child it's probably something they're going to do. And it's just passed on from generation to generation. You will say things, then that they say now I'll never say that. They are timeless. And they keep growing. I think they have to because as times change, and even when you

look at society, two generations ago, if they don't change, what worked then is not going to work now (TC).

TCRT-253   Learned from life experiences with family, friends, peers, and everyone.

It's part of life. Work, home, it's all really the same thing. I mean your personal life or your work life. Well, even here I learned from experience… I had to learn from experiences or life experiences and from my family… and from my friends… from observing other technical coaches… so these things are in my mind… so I think that's how they're developed. Like was my family organized and prepared… Oh God yeah! Definitely! But I know anywhere I worked… I know I always had to know, I had to know things, I had to know why, and so I feel comfortable telling somebody else. It's always been in me since I think the day I've been born (TC).

The more I learn, the more life experiences I have, the more I can add to it (TC).

TCRT-254   Most of what you learn is from personal experience, informally.

They work! That's it! They work! Setting an example works! Learning from experience works! I mean, the caveman learned from experience. Now, I don't think it's going anywhere (TC).

Some of this seems like so much common sense. … Or to think that if you move on to a different role… you would still use these rules. You know, you can just cross TC out and put a blank in its place (TC).

TCRT-255   Nobody writes down what works. You can tweak them when needed which makes writing RTs down too much work.

Nobody writes it down because it becomes, I don't know, when you write it down it becomes something that requires editing and revisiting. Where you use it you adapt it on the spot, on the moment that is needed. It's almost as if you say, here's this role and it says this is what you do in this situation. What if in a situation I need to tweak this rule based on the situation of the person. And I have to go back and adjust it. I know that these are adjustable given any given point in time. It's the same concept, the same basic concept, but maybe I'm going to kneel down today instead of leaning over the desk because I know that her father was in the hospital ... I don't know. It becomes concrete, if you write it down. In other words write this down, that's it. It's on paper, done (TC).

So you can't write it out. Like we did hear, know how to respond differently to different people, but you can't know all of those responses

because they all depend on different situations. It depends on the person and... you would be forever writing them down. You would have to have a rule to keep track of what I've done. I'd be writing all night long. Think about it if you wrote down every rule, every day. You'd have to think about what you used and what context you used it in. It would probably take you the time you would normally sleep to write them all down. It would probably take you most of your sleeping time to write it only to have it changed again tomorrow. No way (TC)!

TCRT-256 Try to write down your experiences and think about them—what happened, what worked.

My manager even told me why don't you write this instance down. Write this whole experience down. Write what you thought was good about it. Write what you would do differently next time. I didn't get to do that yet. But I do want to. I do (TC).

TCRT-257 Advice – think of recipes, pass them along.

But I think its like recipes. Ya know … everybody that wants to, can create their own recipe and just pass it down. Ya know … you go to a restaurant and you're like this is really good, do you have the recipe? Maybe they'll give you the recipe … maybe not (TC).

TCRT-258 A shared experience is a universal common type of thing.

I guess it really wouldn't matter that my job is technical coach in what I'm going to do. I'm going to continue to do this. But that it is…I mean it is a shared experience. Ya know…what I can bring to a situation…I think is going to be a little bit different than what anyone else can bring to the situation. but I think that there's a universal shared wisdom common type of thing. (TC).

TCRT-259 If you have this, then do this.

Scenarios, to me it is scenario based. A lot of our work is scenario based. If you have this … you do this. If you have this … you do this and that can all fall into the same blanket question (TC).

TCRT-260 What works is passed on from person to person.

It was actually passed on thru someone else. It was what he was telling the class about when they were going to write a paper. As, here is something for you to know, to understand (TC).

TCRT-261   Learned experiences come from past times when things worked or didn't.

Yeah they are. For me they're more learned experience … I … specifically to this job, there were times when someone has asked me a question, I had assumed that they knew the background, that they did all the research, so I gave them an answer purely based on their question and they received an error because they hadn't done the background work. They hadn't done the research. And they had taken two steps beyond where they should have to get to where they were. When I gave them the answer, it would not have been correct and it came down to – well – my tech coach told me that that's what I should do. Yeah … that because I assumed you knew you were supposed to be there to make that decision. So I learned – ok – I can't assume … learned experience (TC).

TCRT-262   Advice is your learned experience. I learned it and lived it.

…it is like a learned experience. I find if more helpful … yeah … so I found it that way because I learned it. I lived it. (TC).

TCRT-263   Shared Wisdom is advice.

… shared wisdom … shared wisdom … that is, that's advice. One of my … one of our TCs, was very fond of saying – know your audience. Know your audience. Know your audience. You're not gonna try to explain rocket science to someone who's someone still sitting there playing in the mud. And ya know ... pick your battles … think that's my dad. Yep … shared wisdom (TC).

TCRT-264   Try new ways, build on what works.

... they don't know what I do. Do I get that information to them in a way that they can read the documents? They can read the procedures. But they still don't know how to do it, so what is it that I'm adding to that … that gets them to know how to do it. Paying more attention to that and now trying to find – now alright let me see how this guy does with the process and next time I do it let me build on that. Let me see how that person does with the process and then find what works (TC).

I was thinking – Oh God, I have to train somebody in something. But … and the neat thing is the material that I used, the actual basics were created by another one of the tech coaches who just … who had found previous materials that … it was amazing material that is gonna keep getting passed on with each of our little bits of additional information to it, so that is kinda combining the two (TC).

TCRT-265   Use your experiences as a touchstone.

Experience. Using this. Actually using it as a touchstone to … to come back to. Part of management … they give you a discussion planner. They're giving us all sorts of tools. Showing us, videos on how to lead and how to … all this stuff. And I'm watching all this stuff and reading all this stuff and I'm going … its just common sense. It just makes sense. It's all stuff that really shouldn't be that far out of our reach (TC).

TCRT-266   What works is unwritten and ingrained in me.

I probably won't sit down and write it down. But it will spin around in my head and as I go out there later on this afternoon and I start answering questions, it will be like this little checklist going through my head … OK give options. Don't tell ask them. Have some patience now. Ya know ... actually gonna be like right in here … I think these are just kind of ingrained. This is just not something I would have to remind myself of (TC).

TCRT-267   Don't be afraid to learn by trial and error.

I would say my rules-of-thumb come trial by error of how maybe things work or have worked in the past for me and what I've saw that was successful so far, and I go to it that way (TC).

TCRT-268   What worked for you in the past may not work for you in the future.

It's just trial by error. It's what worked for you in the past and knowing that may not work for you in the future (TC).

TCRT-269   Seeing something done is only one side of it; doing it is the other.

So we are basically writing the basics down and then whoever is responsible for that, they are going to be responsible to explain the reasons why we do it. I know, when I get a book like this big thick book I think, I'm not reading all of that. So we're just trying to give them the basics of what we do and when they have that first month of shadowing we will let them see those examples and explain it to them while they are shadowing, because if you don't see it and you were just telling somebody… then your like, what are you talking about. I can say that now because I've seen it. I have seen both sides. The person only saw one side of it. They are not going to get it unless they actually see it. And that's the end of it (TC).

TCRT-270   We should all share whatever works for us with the new person

Yeah, that's my rule. Everyone kind of agrees with that, because we learned from experience. We used to stick a new TC with one person, and then they only saw what that person kind of did. Now that I'm working with this person they don't do it that way, how come, how can they do it different than this person. So you get the same job done, but in a different way. Whatever works for you once you are getting your job done, that's fine. So that's the reason why we are coming up with the process, because we never had a process like that before, and once it's up I think it's going to be a good thing. It gives some idea if it doesn't help them, it will get them at least thinking. It's like I can follow this rule, but I can also come my own little twist on it. It will still help them out a little bit (TC).

TCRT-271   I just know it, I just remember. It's in me.

I just learned them over the years, I guess. Just everything like... I think my brain just works like a sponge. Literally most of the stuff I just know, I just remember, and I just remember because I had that phone call or I had that question. Or, I just know it, I read it somewhere. I saw it somewhere. This person told me and I just remember it all. So I just know it (TC).

But it's right here [pointing to head] (TC).

TCRT-272   Past experiences help me relate to you and help you.

No, I just... I use a lot of my past experiences and I coach with them. Like I used to get crazy calls like, well, how am I going to know this and I'd say, well, someday you'll get to that point, but for now … I use a lot of my past experience, because it helps it helps a lot, because I can relate to them. I can't think of somebody coming from the outside who never did this and went right to my job and try to tell them how to do it (TC).

TCRT-273   Guidelines are written. Common sense is something everyone should know.

I think we have to drop the word guidelines, because guidelines are usually something that's written that guide you in a certain way, where common sense is … what it is common sense is something that I think everybody would know, because that's what common sense is (TC).

TCRT-274   It just makes sense to me.

I know how to approach each person. So it just makes sense to me, because the way I do things may not make sense to everybody, but to me it does. It works for me. It might not work for everybody. But, it works for me (TC).

TCRT-275   The end result should be the same but the way to get there can be different

It depends upon how they take it all in… and I mean the end result should be the same. The way they get there can be different (TC).

TCRT-276   There are things you have to do (rules) and things you don't have to do.

There were too many rules when I was growing up, and I don't like rules. I don't like them to be called rules. Things you do, things you don't have to do. I'd rather something else, I don't like rules (TC).

TCRT-277   Remember life experiences and how they feel.

And then remember life experiences. If somebody hurt you, you know how it feels. So why would you do that to somebody else? When I hear other people talking about others and I don't like it and I don't wanna get involved. Sometimes it's very hard not to and I'm like no, it's none of my business because I know how it feels I guess if somebody said something or talked about you (TC).

TCRT-278   Get and keep your priorities straight.

Yeah. Yeah, fill your bucket with the big stuff, the important stuff. All the stuff you care about and then I got a different bucket for home but if I put all those things together in one bucket, big rocks are my family and friends. My pebbles are work. I've got my priorities straight. And the sand is all that stuff that happens. Sand happens (TC).

TCRT-279   If it worked in this situation, maybe it will work in another. Give it a try.

Because in this situation it works, and maybe in this situation it works, so it's just let's take a look and see. Let's take a guess at it and try it (TC).

TCRT-280   There is always room for interpretation.

Well, if it's not in the procedure, that says you need to do it this way or this way. If they leave it open ended that leaves room for interpretation. I think it depends upon how the procedure is written as to when you can deviate from them. And again, not every situation exactly is going to be able to be placed in a procedure. Otherwise, our system would probably go down because there's just too much information in the house (TC).

TCRT-281   Nothing is carved in stone. Always trust your judgment.

Nothing is carved in stone … There can't be a rule for every single call that comes through so judgment has to come in at some point (TC).

TCRT-282   Learning comes from experience.

Where did I learn that? Experience, just experience (TC).

TCRT-283   Develop your way, what works for you.

I would encourage the upcoming TC to develop their own way of tracking follow-ups. It's whatever works for you. Like one person might use Excel, I may just write them down or put the circles around them. It might be juvenile, but it works for me (TC).

TCRT-284   Be flexible and use what works for you to get the correct result.

Yes, flexible. It's whatever works for you, highlighting works for me, but may not work for someone else (TC).

TCR-285   Most of what you learn, you learn informally.

Because they work! That's it they work! Setting an example works! Learning from experience works! I mean, the caveman learned from experience. Now, I don't think it's going anywhere (TC).

TCRT-286   If it works, it will produce the desired out.

It's something that works. If you want to meet production, don't overanalyze … It is something that produces the desired outcome (TC).

TCRT-287   Rules-of-Thumb are implied best practices, good advice, unwritten

And I think that rules-of-thumb are kind of best practices, things that are implied, good advice that you received, things that aren't maybe written out and almost tied to morally right and ethical. Those kind of things are to be rules-of-thumb (TC).

TCRT-288   Rules-of-Thumb don't always work; they are not set in stone

I think that my definition of rules-of-thumb, is that they don't always work. So they are not set in stone. You know what I'm saying. Do you know what I mean? Whereas rules I think are kind of set in stone. A rule-of-thumb, I think, it's just not always going to work. It's just, experience has showed that it has worked the majority of the time (TC).

TCRT-289   People need to develop their own rules-of-thumb of what works.

I would give them a TC rule-of-thumb. In the sense of suggesting these things might work. Okay, let me stop there for second. I can't… I don't think I would be able to say. Here are the answers that you would be giving your team. I don't think that it would be possible for me to go in and train them on that, on those systems or something on those lines. What I would give them is… so those kind of rules-of-thumb, the mental checklist, like thinking of things, like this question came up before and my rule-of-thumb would be check this, check this, check this. I think that would be hard to pass on to TCs and try to train TC's because they come with experience. I think they have to develop their own rules (TC).

TCRT-290   In general some things I can pass on are interpersonal aspects of the job

But in general, some of the things that I can pass on like another set of rules-of-thumb of knowing your team, knowing your strengths, knowing the weaker players on the team, make sure you listen to the question all the way through, make sure if you don't understand the question you asked them to repeat the question, and the other advice things that I had mentioned before. Those kinds of rules-of-thumb I think you can give out, the interpersonal aspect of the job (TC).

TCRT-291   It's hard to give advice to peers; all you can do is offer suggestions.

If I were training them it would be different because when I give them that advice it would be things that I think would help them succeed. If they don't follow it, they may not succeed. I won't say that they will not succeed, but they may not succeed. So I would almost have the attitude that unless I were their boss… that would be a different situation, if I were their boss and giving them these things, then I can say hey, you're not doing the job, you're not. If I'm just suggesting it to them in a training environment I think it would be harder to say, you know, stop doing that, especially if I were just one of their peers (TC).

TCRT-292   Basically you live by your inner rules.

And I think it's interesting how we broke down your inner rules into things that you basically live by … it's just fascinating, because I think these things aren't just necessary to only pass on knowledge they are necessary for other things in life. I think it's interesting that you would go back to these core set of rules (TC).

TCRT-293   It's inside my head. I know.

Inside my head. I mean from basically experience. Knowledge. I know these situations. So when I think about it…I know (TC).

TCRT-294   Situations, questions, trigger what I need to do; what I know works.

I kind of use my head like a computer type thing. If she asked a certain question about a certain situation it probably triggered something in my head, where I've had this question before and all the steps that I would need to follow and all the questions I would need to ask kind of just are there for me, so basically going to the checklist. I came to the conclusion and that was probably that. Do you know what I'm saying? It's almost like a mental checklist that I have for situations.   A lot of times, there's new stuff that comes out, that's where the experience comes from. It kind of adds into my head into my library of stuff you could say. Do you know what I mean (TC)?

TCRT-295   Learn from all the experiences you've had and pass that on.

What am I passing along? Just all different experiences and what I've learned since I've been a CSR (TC).

Future Thoughts – Building Upon My Knowing

TCRT-296   A handbook doesn't give you the same experience or feeling as doing the job.

It's amazing in the fact that nobody can teach you what you need to do this job because the most important parts of doing this job are not something that you can really get from a handbook. It's something that maybe we experienced. Either we felt we had these things given to us or completely opposite and that we didn't and now that's what we want to do. Truly most of these things if you read them you can't read in a book and figure out what to do (TC).

TCRT-297   Let people have the experience of learning on their own.

Its just that … now I'm starting to think am I … am I preventing other people from having that experience of learning it on their own? By giving them the information. But I'm very conscious of that when I'm giving them the information to try to let them make those jumps. Give the pause … ask the question – ok now what do you want to do? Ya know to me I always thought it was ok gauging for understanding but also giving them the ability to have that … aha …ya know give them a little piece of the

information. Feed them a little bit. And then let them make that step. Take that process (TC).

TCRT-298   Share the benefits of the experiences I've had.

My theory is that I'm gonna share the information. Try to give them the benefit of the experience I've had. If they chose to take that knowledge and utilize it …great! Ya know … maybe we can avoid some poor outcomes. If they choose not to at least I've given them that information. I've given them those tools. So I think its better to share that information. Give them the choice to potentially be successful or not successful but with all the information that I can possibly give them. And then perhaps then they will take that information and share that. Because when I leave the floor they still have questions. They'll ask each other and a lot of times they'll say she told me this … ah ok and the other person will take it. So it just becomes like a grapevine type of thing (TC).

TCRT-299   Pass along – take any advice that comes your way and find out what works best for you.

I would probably pass along take any advice that comes your way and find out what works best for you because there are so many TCs here that do things in such different ways. But there is something that I found that I can pull from each one that works for me. Not everything is going to work for me or everybody (TC).

TCRT-300   Rules-of-thumb ... That's my experience! That's my thoughts!

I would like to take these bullet points and share them with somebody else. This is what I think a good TC would be. There it is. That's my experience. That's my thoughts. I want to share that with you. Because now seeing it written on paper, yeah, I want to go and I want to share that with another person (TC).

Researcher's Reflection and Summary Of The Study's Data

What was the experience of using rules-of-thumb like for a Technical Coach when sharing knowledge? Observations and interviews shaped the researcher's thoughts and he suggests the experience was like the following statements imply.

The TC and team worked together in a production environment where the TC was responsible for making the team successful in producing a desired result(s). The TC took ownership of the team, the CSRs personal work, and overall team results.

The TC solved problems – human problems – that obstruct the desired results. In doing so, the TC was recognized as a subject matter expert learning from experience – trial and error – theirs or others.

The TC learned from the experience of watching others and remembered what worked and in what situations. What worked for them became his or her rules-of-thumb.

The rules-of-thumb were learned experiences, mental tools, that helped produce results. The rules-of-thumb helped solve puzzles and produced desired results.

Rules-of-thumb became a shared experience between the TC and the team-member. Rules-of-thumb helped someone understand possible choices.

Using rules-of-thumb instilled confidence in both the TC and the team-member. Confidence brought about success in doing the tasks required by the TC and team-member.

The TC used rules-of-thumb for personal success and team success; for personal survival and team survival; to increase efficiency; and to change behavior.

The TC knew rules-of-thumb were adjustable and could 'tweak' rules-of-thumb for new situations and new environments.

Rules-of-thumb were within the person – they just knew it. Rules-of-thumb were remembered – what worked before when solving problems. The TC was aware of what worked for them and used these inner knowings. However, the awareness may be an unconscious awareness and automatic, or a conscious awareness.

Rules-of-thumb were undocumented and remained unwritten unless asked for. The reason for the tacit nature may be to provide self-preservation for the TC or maybe not.

The more rules-of-thumb a TC had the more puzzles (problems) he or she could solve.

Rules-of-thumb were born – lived – grew – and never died. They were timeless.

Summary and Conclusion

Chapter Four presented the study results. Four sections divided the chapter. The first section was a summary overview of what happened during the study. The second section presented the experience of what it was like for a TC to use rules-of-thumb when sharing knowledge; and offered 300 TC rules-of-thumb in both a transcontextual and contextual fashion. The 300 TCRTs and supporting passages shared the TC experience in answer to the research question. The third section expressed the researcher's reflection and summary of the study's data. And this final section concludes this chapter. Chapter Five presents a summary, implications, and reflections regarding this study. Chapter Five follows.

CHAPTER 5

Summary, Implications, and Researcher's Reflections

What was it like to experience using rules-of-thumb when sharing knowledge?

The experience was one of sharing what works with others.

This chapter presents a summary, implications, and researcher's reflections of this

research project. As before the chapter follows the researcher's rules-of-thumb in its

creation and presentation.

RRT-47   Present a summary of the study in brief, vivid terms from its inception to its
              final synthesis of data. Moustakas (1994) was the source of this rule.

Summary

Polanyi (1966) suggests, "we know more than we can tell" (p. 4). That statement

became a touchstone for those interested in exploring, describing, and understanding the

concept of tacit knowledge. As the literature review revealed, tacit knowledge is stored

in the heads of people, built from trial and error of experiences over time, contains both

tacit and explicit dimensions, and is valuable and essential to any individual, group, or

organization. But, the tacit component of knowledge is difficult to capture and share.

This study explored, described, and interpreted one epitome of tacit knowledge called a

rule-of-thumb in use and the experiences behind that use.

The researcher entered this study with the notion that experience was something

that one has done or lived through, physically, intellectually, and/or spiritually. The

researcher desired to understand an individuals experience with the phenomenon rule-of-

thumb. This desire aligned with the purpose of the study. The purpose of this study was

to expand what is known about rules-of-thumb as an embodiment and face of tacit knowledge and component of workplace knowledge.

From the beginning, the initial question proposed was what is it like for an individual to experience rules-of-thumb? This is the point at which this study truly takes shape. The study needed context – a background and circumstance.

Recalling the statement, "we know more than we can tell" (Polanyi, 1966, p. 4) as one accepted description of tacit knowledge, this study sought to find a context where individuals must tell what they know. The researcher desired a context where knowledge was valued, expected, and required in an organizational setting. A customer service operations center became the setting for this study. Within the organization Technical Coaches (TC) had the responsibility of sharing what they knew with an assigned team of Customer Service Representatives (CSR). The CSR provided customer service to the organization's clients by responding to customer questions and then processing customer account data. The organization required the TC and his or her team to meet specific metrics of customer service production. The knowledge of the TC in supporting his or her team was valuable. Again, the researcher considered, "we know more than we can tell." Could the TC tell what he or she knows and if so, what was that experience like? That was pointing to what the researcher intended to explore.

To begin to address the above question, the literature suggested an individual like a TC may be similar to a subject matter expert and guided by a repertoire of informal rules and guidelines. The literature went on to say those informal rules and guidelines were inherently tacit and difficult to fully articulate. Also, those informal rules and

guidelines, gained from trial and error and numerous life experiences may be considered rules-of-thumb – an epitome of tacit knowledge.

But how does one study an abstract notion such as rules-of-thumb, especially when it is a concept that is difficult to capture and share? The challenge is to operationalize the phenomenon to study it. The researcher concluded the study should capture the phenomenon of study, rules-of-thumb, while 'in use' by an individual in the natural setting of the participant's workplace. 'In use' was the notion of a TC participating in knowledge sharing. The study focused only upon rules-of-thumb used when sharing personal knowledge. At this point the researcher felt the study became whole. All components began to meld together. The researcher had the bounded context of a customer service operations center as the point of entry into the inquiry. Within the organization existed instrumental embedded cases to understanding the phenomenon of interest, rules-of-thumb. The instrumental embedded cases were TCs and the study explored their experiences as they used rules-of-thumb to do something – share what they know. The research question shaped itself as: "what is the experience of using rules-of-thumb like for a Technical Coach when sharing personal knowledge?"

The SECI model within the Theory of Organizational Knowledge Creation of Nonaka and Takeuchi (1995) became the framework to bind and view this study. The Theory of Organizational Knowledge Creation suggested two types of knowledge existed, tacit and explicit. It went on to say that tacit and explicit knowledge moved through a relationship and conversion process illustrated within the SECI model. The process represented knowledge at the individual, group, and organizational level. Four modes of knowledge conversion existed: Socialization, Externalization, Combination,

and Internalization. Nonaka and Takeuchi (1995) suggest as knowledge moves through this conversion process knowledge represents itself differently and ultimately creates new knowledge. The unit of analysis, in this study, was the individual.

With this particular framework the researcher followed tacit knowledge and explicit knowledge, operationalized as a rule-of-thumb, through the process of Socialization, Externalization, Combination, and Internalization and perhaps expanded the understanding of an individual's experiences with a rule of thumb.

With the above thoughts in mind, the researcher collected the study data, first observing the TC and recording patterns of happenings that suggested the use of an informal guideline or rule; then employing in-depth phenomenological interviewing and discussing the recorded happenings exhibited by the TCs. With the confirmation of the TCs after an extended period of interviews (three primary interviews and three secondary follow-up interviews for each TC) over 1500 potential rules-of-thumb appeared. This number of rules-of-thumb winnowed into 500 rules-of-thumb accepted by the TCs. The researcher removed any duplicate or similar rules reducing the list to 300. The 300 TC rules-of-thumb presented as findings in Chapter 4 captured a brief glimpse of the experience of using rules-of-thumb for a TC when sharing personal knowledge. An important point to note was the rules-of-thumb in Chapter 4 appear transcontextual – applying across a variety of contexts and domains.

The researcher stated the following limitations. The study limited its focus to one facet of tacit knowledge, a rule-of-thumb, and the experience of using that phenomenon in the natural setting of the workplace in the process of sharing knowledge. This study accepted the definitions and attributes of sharing knowledge offered from the literature

review. This study did not investigate tacit or explicit knowledge, knowledge transfer, or knowledge creation beyond what the literature suggested. To do so was beyond the scope of this inquiry. This study focused upon only what it was like to use rules-of-thumb when sharing personal knowledge for 12 individuals, all who held the role and responsibilities of a TC in a customer service operations center. One can not generalize this study beyond the story of these 12 individuals. However, the findings of this study should be of interest wherever workplace knowledge is concerned, managed, or studied.

The following sections offer insights to what the findings suggest.

With Regard to the Theoretical Framework

The study was able to follow a TC's rule-of-thumb through the theoretical framework of Nonaka and Takeuchi's (1995) SECI model within the Theory of Organizational Knowledge Creation. This framework became transparent to the workplace actions of the researcher and TCs during the study. Socialization, Externalization, Combination, and Internalization, the four components of this framework offer the following insights.

Regarding Socialization, the TC would share personal inner rules-of-thumb by allowing the CSR to 'shadow' or follow the TC as he or she would show (demonstrate) how to complete a task. For example the TC would take/handle/complete the phone call of a client or the TC would complete a data entry task about a client with the CSR observing. An example rule-of-thumb collected was: 'TCRT 88 - Learn by observing.' Socialization did occur.

Regarding Externalization, the TC would verbally share the if-then-because properties of a rule-of-thumb that the TC knew would help the CSR at that moment and

in the future in completing tasks. An example rule-of-thumb was: 'TCRT-177 If you are confident your voice will display that.' Externalization did occur.

Regarding Combination, the TC knew the company's policies and procedures for handling calls and processing data were located on-line and the TC knew how to access these policies and procedures. Here the TC would have the CSR look up the information needed, to get the experience of finding correct policies and procedures, or tell the CSR where to look and how to interpret the information within the particular policy or procedure. However, the TC did not, I repeat, did not write down and distribute any of his or her personal rules-of-thumb in the presence of the researcher. An example rule-of-thumb was: TCRT-255 'Nobody writes down what works. You can tweak them when needed which makes writing rules-of-thumb down too much work.'

The researcher did not observe combination during the study. Nor did the researcher collect any interview statements suggesting combination occurred regarding the use of rules-of-thumb when sharing personal knowledge. Combination did not occur.

Regarding Internalization, the TC did reference techniques and experiences learned from others during the course of the study's observation. The TC did try different 'ways' of doing tasks or dealing with the CSR as long as they 'felt' it would be productive in that moment. For example, the TC reflected upon past advice as a learned experience as suggested in this rule: TCRT-262 'Advice is your learned experience. I learned it and lived it.' Internalization did occur.

The above thoughts and examples suggest one could operationalize an epitome of tacit knowledge – rules-of-thumb – and follow that phenomenon through the SECI model suggested by Nonaka and Takeuchi (1995). This study also suggests Socialization,

Externalization, and Internalization were the most prominent processes of knowledge conversion recognized during this particular study. Combination did not occur.

With Regard to the Literature

As stated in the beginning of this document, the literature review found only a scant number of studies directly related to understanding rules-of-thumb as used in the workplace. This particular study focused directly upon the experience of an individual using rules-of-thumb when sharing knowledge in the workplace. No other study had that focus.

This study supported the literature in the following areas. With regard to <u>what</u> a rule-of-thumb is, the literature suggests a rule-of-thumb is an informal guideline; a mental pattern; a shortcut to contextual knowledge; a decontextual statement; a code used by experts; an action-oriented inner knowing; a vehicle for learning; a synonym for advice, lessons learned, best practices, and common sense; a form of tacit knowledge; a form of explicit knowledge; exhibits of intuition; freely expressed condensed knowledge; and a key component to sharing and transferring knowledge. The study agreed with these suggestions with one exception. This study recognized rules-of-thumb as transcontextual rather than decontextual.

With regard to <u>who</u> uses rules-of-thumb, the literature suggests domain experts and coaches use rules-of-thumb to communicate, transmit, and build knowledge as well as expedite the work they do. Novices use rules-of-thumb as initial informal guidelines regarding what works as they build personal knowledge. The study agreed with these suggestions.

With regard to the <u>capability</u> of rules-of-thumb, the literature suggests rules-of-thumb summarize patterns into simple, memorable, and reliable statements; transfer knowledge quickly and easily; are easily recognized by practitioners of the same domain; work well in conjunction with good examples; speed decision-making and problem-solving; work in similar situations; are both simple and complex and may contain emotions; and are not intended to be strictly accurate or work in all cases. The study agreed with these suggestions.

With regard to the <u>source</u> of rules-of-thumb, the literature suggests rules-of-thumb develop from trial and error; generate in the course of practice; pass on from senior personnel to junior personnel; develop over time from long experience; develop from observation; and relate to historical knowledge within a particular area. The study agreed with these suggestions.

With regard to tacit knowledge, the literature suggests tacit knowledge is personal; residing within the mind and body of the individual; undocumented; difficult to express; difficult to operationalize for study; procedural in nature; shared face-to-face; shared in action, story, and metaphor; and can be defined as "We know more than we can tell" (Polanyi, 1966, p 4). As the literature suggests the use of interviews and observations enable the study of tacit knowledge. The study agreed with these suggestions. However this study did operationalize tacit knowledge through its epitome – rules-of thumb.

With regard to explicit knowledge, the literature suggests explicit knowledge is expressed, articulated, and reproducible. The study agreed with these suggestions.

With regard to knowledge sharing, knowledge transfer, and knowledge creation, the literature reviewed sensitized the researcher to the attributes assigned to each. Investigating each concept regarding what the literature suggested was beyond the scope of this project. The study saw knowledge sharing as a personal interplay of person-to-person exchanges, spoken and unspoken, of what one knows, what one can do, and what one believes to be so. This is as the literature suggests.

The study recognized knowledge transfer as the transmission and absorption of knowledge by others and this is as the literature suggests.

Finally, the study recognized and accepted knowledge creation within the processes and representations of Socialization, Externalization, Combination, and Internalization. However, the process of Combination did not occur and the literature does not address the SECI model functioning with only three of the four processes involved. The purpose of the study was to use the SECI model as a guide, as it stood, not to critically examine it. The lack of Combination deserves more investigation.

Additions to the Literature

This study expanded the literature regarding the experience of using rules-of-thumb when sharing personal knowledge in the following ways:

1. The researcher suggested this was the first study to directly explore the experience of a technical coach, who must by description of job, share what he or she knows with a team to accomplish a workplace task that task being customer service in the natural setting of the workplace environment; and explore, describe, and interpret the experiences of that individual as he or she uses rules-of-thumb when sharing personal knowledge.

2. Presenting and recognizing the collective whole, a list of transcontextual statements that are rules-of-thumb of a job/role is an important finding of this study. The collective list provides a snapshot of a part of the whole job or person within that job. As one TC suggested, this list is like a job description for a TC or as another participant said, "if you move on to a different role… you would still use these rules. You know, you can just cross TC out and put a blank in its place" (TCRT-254). The thought of collecting rules-of-thumb for a particular job to create a type of job description deserves further research.

3. Support the list of transcontextual statements with contextual narratives and the experience of a person unfolds. For example in this study, the rules-of-thumb with context presented what it was like to use rules-of-thumb when sharing personal knowledge for a TC. When the presentation of either transcontextual or contextual rules-of-thumb was in the words of that person or persons within that role, it was their experience, defined by their rules-of-thumb. A reader could accept their experience at face value. The collective list of statements and narratives suggested what it is like to live through their role.

4. As several participants within the study suggested, the collective list of rules-of-thumb define me, express what works for me, express what I do, and become 'touchstones' to navigate my job and life. The collection of personal rules-of-thumb became a personal compass of sorts guiding and pointing the person to what works, when, where, and how.

5. Rules-of-thumb appeared to be infinite and endless in count. One rule-of-thumb appeared to build upon another. That is a possibility of why, as in this study, the

participants did not document their rules-of-thumb. The task of documentation became overwhelming and burdensome in addition to performing the role of TC. However as stated above the documentation of rules-of-thumb brought value regarding the job or role of an individual. Organizations should designate an individual to specifically collect rules-of-thumb. The researcher was the primary collector and recorder and this took much time and great effort on his part. The effort proved worthwhile.

6. To collect rules-of-thumb from an individual simply ask in this fashion, "tell me your rule…" For some unknown reason to the researcher, the individual targets his or her personal inner knowing gained from their own personal experience. The rules offered by the individual, as in this case, were informal inner rules and not formal policies or procedures.

7. Rules-of-thumb appeared more formless than form. One could point out the tacit and explicit dimensions of knowledge. Rules-of-thumb have a foot in both tacit and explicit knowledge. However in this study the expression and documentation giving form to the rule-of-thumb was but a thin veil of what really existed within the mind and body of that individual. Probing deeply into what it is like to use a particular rule-of-thumb may not be fully possible. The true meanings behind the words and the stories may be elusive to the listener or reader leaving only superficial ideas and meanings to ponder. Explicit rules-of-thumb point to what one needs to know or do, but then one's relationship with rules-of-thumb becomes personal. The interpretations of meanings were infinite and bound and embodied within the individual. And all one can hope for was a degree of understanding.

8. Rules-of-thumb appeared to have a universal quality to them. For example, individuals not familiar with this study upon reading the transcontextual statements listed in Chapter Four would in some way connect to these transcontextual rules-of-thumb. A phenomenological nod or smile of agreement would appear from the reader. This happened during the follow-up interviews with the participants when they nodded and smiled in agreement with the list and how it expressed their experience as a TC. It happened with others who read the list. At some deep level, perhaps within the concept of oneness suggested by Nonaka and Takeuchi (1995) and within traditions of eastern wisdom, we connect to others' experiences. Viewing a collection of rules-of-thumb may enable us to do so – connect to each other and a common path of life. This deserves future consideration and investigation.

9. Two types of rules-of-thumb appeared in this study: hard rules and soft rules. Hard rules connected the user with an object or thing such as a book or a procedure. An example of a hard rule was: TCRT-101 'Highlight important things you need to stand out.' Soft rules connected a user with a person or with one's self. Examples of soft rules when relating to a person: TCRT-171 'Don't start someone's day off bad news' or TCRT-201 'Most people already know the answer. Go with your gut.'

10. A rule-of-thumb must be adopted and owned by the user – embodied into the inner knowing of that individual – otherwise what was possibly considered a rule-of-thumb for one person was merely information for another.

In summary, the above additions to the literature suggested using rules-of-thumb expanded the connection we have to each other and to our world view. When viewed collectively rules-of-thumb pointed us to a clearer picture of what a whole person, whole

role, and whole human relationship might be like. When reviewed individually we found

what works in a particular instance may also work in a similar yet different context or

circumstance. Rules-of-thumb were transcontextual or as one participant said, "some of

this seems like so much common sense. … Or to think that if you move on to a different

role… you would still use these rules. You know, you can just cross TC out and put a

blank in its place" (TCRT-254).

Future Research Suggestions and Recommendations

This study was an exploration into the abstract realm of the experience of using

rules-of-thumb, particularly when used in sharing knowledge in the workplace. Being an

explorative study, many thoughts/questions surfaced in the mind of the researcher. The

following suggestions and recommendations provide future research ideas for those

interested in further understanding the experiences of using rules-of-thumb in the

workplace or beyond.

1. The researcher intends to duplicate this study with coaches in other industries

and determine what experiences are found to be similar or not in the use of rules-of-

thumb when sharing knowledge.

2. One could collect rules-of-thumb and explore the experiences of using those

rules in any job of interest. One could determine if the rules-of-thumb for the

individual(s) of a particular job define that person and that job and how precisely they do

so. Can rules-of-thumb create a job description? A participant of this study suggested

that thought. Is that possible?

3. One could also investigate whether the rules-of-thumb are of value to an

individual, group, organization, or process. Determining the importance of a rule-of-

thumb as well as determining the value of the source, the person with the rule, deserves

further consideration. For example consider the rule-of-thumb, "be prepared for the

unexpected." What value does that rule have across occupations, processes, or

resources? How would the CEO of an organization respond to that rule? How would a

student or teacher respond to the same rule? One could consider the value of the rule as

well as the value of the source and the value of the rule's application. Rules-of-thumb

appear infinite in scope, determining how to appraise the rule, appraise the source, and

appraise the possible applications of the rule are future research possibilities.

　　　4. Could similar outcomes – a similar collection of rules-of-thumb – arise from

exploring participants with the same job responsibilities but from different contexts? For

example would exploring experts – technical coaches – across a variety of organizations

within the same industry provide a valuable collection of rules-of-thumb? And would

this research provide a more robust and efficient way to expedite the collection of rules-

of-thumb worth capturing? How would one conduct that type of study? These questions

offer more research possibilities.

　　　5. As mentioned above, soft rules point toward informal guidelines in effective

person-to-person workplace relationships. One could collect and explore the soft rules-

of-thumb that evolve from successful human relationships in the workplace in areas such

as supervising, teamwork, training, and leadership. Classroom teaching may also be

included in this inquiry.

　　　6. In addition to collecting the soft rules of workplace relationships the researcher

desires to collect and understand the soft rules-of-thumb related to creativity, innovation,

and motivation in the workplace. Also it would be interesting to explore the hard rules-

of-thumb related to the physical resources required for creativity, innovation, and motivation in the workplace. A study of this nature could expand and encompass the individual, group, and organizational levels. And may also be targeted at the classroom focusing upon teacher and student experiences regarding each other and regarding the teaching/learning environment.

7. A possible relationship between rule-of-thumb and competencies suggests another avenue of investigation. From this study the researcher considered a rule-of-thumb the precursor to a competency. The rule-of-thumb appears to point out what one needs to know or do to accomplish a desired task successfully. The full knowledge, present skill, or present ability of an individual may suggest the possession of a competency. From this study, the researcher suggests the rule-of-thumb offers awareness of what one needs for success rather than the actual possession of the knowledge, skills, abilities, or other factors which demonstrate success. Future research should consider the relationship between rules-of-thumb and competencies.

8. The researcher is interested in the 'phenomenological nod and smile' of agreement or connection when an individual, either within the study or outside of the study read the explicit list of transcontextual rules-of-thumb. What does that nod or smile mean? Is it a form of awareness linked to something beyond one's intellect, perhaps one's spirit or soul? And, how does that 'nod' relate to rules-of-thumb?

9. This study brought out a personal inner awareness of what works. Therefore, of strong interest to this researcher is fully comprehending the interplay between body/mind/spirit and the types or kinds of awareness an individual experiences in each with regard to rules-of-thumb. From this study the researcher has pondered the body

with its relationship to the physical senses and information; the mind or intellect and its

relationship to knowledge and resulting memory; and now of most interest is the spirit

and its relationship to awareness or the growth of one's life due to new experiences

experienced. The researcher desires to understand awareness and all aspects pertaining to

awareness in the workplace, the classroom, and the marketplace. The researcher has a

gut feeling awareness links to tacit knowledge and rules-of-thumb. However the abstract

nature of this subject requires time for much study, reflection, and deep conversations

with those of like mind.

   10. What is your rule? Why did that question open a flood of personal rules-of-

thumb? Consider this question, what are the rules for handling a disgruntled customer?

That question brought formal organizational rules and guidelines. The suggestion of

'your rule' brought a response of personal inner knowing or perhaps as the literature

suggests, tacit knowledge. Do personally directed questions elicit tacit knowledge such

as rules-of-thumb? More understanding is required here.

   11. Is there a core rule-of-thumb in the soft realm of rules-of-thumb? Is the

'Golden Rule' suggesting a person treats others as he or she would like to be treated in a

like situation, the starting point of soft rules relating to human relationships? Is this rule

number one? Can this 'rule' be a basis of successful human interplay in the workplace,

marketplace, and classroom? More understanding is required here.

   12. Finally, the terms knowledge sharing and knowledge transfer need

clarification and more understanding. Upon reviewing the literature for this study, this

researcher found the terms used interchangeably. A thorough precise literature review of

the use of the terms across articles within workplace knowledge may prove beneficial in creating a clear and workable definition of each term and a common language.

These twelve suggestions of future research and questions for investigation will point the direction of exploration for this researcher. Perhaps others may find these suggestions for investigation interesting and provide fodder for their research agendas.

Implications

RRT-48   Be able to address the "So what?" question.

What implications, if any are relevant to society? To your profession? To education? To you as a learner and you as a person? Moustakas (1994) suggested a researcher address those questions within his or her study.

As said before, this was an explorative study with more questions unanswered than answered. These questions became the implications to society, to my profession, to the field of education, and to me as a person and a life long learner. The following express my thoughts regarding potential implications.

Society or humanity is a source of rules-of-thumb – guidelines to what works. Rules-of-thumb are valuable to all members of society. We can enable and help others achieve and accomplish what we have successfully done with rules-of-thumb. We can also learn how to achieve and accomplish what others have done with rules-of-thumb. However first, we must be aware of rules-of-thumb and then seek them out and collect them.

As demonstrated within this study, the experience of seeing and internalizing a collective set of rules-of-thumb offer one the ability to know more of the whole of a

person or role. The collective set of personal rules shape, define, and give form to the person belonging to those rules, perhaps even the person's culture. If you want to 'feel' what it is like to participate in a particular role, study and use the rules-of-thumb of the person within that role. Sounds simplistic but this study suggests to do just that.

Society must not take personal rules-of-thumb for granted. Instead society must explicitly seek them out. Collect and record them. Then share them to expand success within individuals, groups, and organizations. It is sharing what works! The challenge is the time involved to have meaningful person-to-person relationships. Time is necessary to share life experiences, not superficially but in a meaningful bond that embodies the experience deep within the inner knowing of the individuals involved. This study took the time to build the relationships necessary for the researcher to understand the experiences of the participants.

The question becomes four fold. First, will society believe rules-of-thumb are as important as this researcher believes they are? Second, will society dedicate the time and effort necessary to build the relationships necessary to collect, codify, and share rules-of-thumb for success? Third, beyond person-to-person face-to-face sharing as with this study, will the virtual environments, such as internets, iPods, cell phones, TV, radio and the like be enablers or barriers to sharing and internalizing the life experiences required to develop personal rules-of-thumb? Finally, this study investigated notions many consider abstract and difficult to conceptualize and internalize. Will society accept and consciously share the abstract soft rules-of-thumb of human relationships that potentially bring workplace, marketplace, and classroom success? At the time of this study the

researcher reflected upon these questions. They are questions to ask. He believes the answers and reasoning behind the answers are valuable to society.

Should society see value in the collection and sharing of personal rules-of-thumb, particularly soft rules, society can address the following domains: workforce education, classroom education, and marketplace education.

Regarding workforce education, this study suggests all individuals, and let me repeat, all individuals spanning from those who support others to those who receive support should take the time to deeply share what works for them. The experts must take time to develop the relationship with the novice and the novice must take time to develop the relationship with the expert that enables each to completely and openly share what works for them; first understanding each other and then understanding and pursuing common goals.

This study suggests the rules-of-thumb regarding being able to read people and getting to know people demands the attention of workforce education. The study also suggests the rule-of-thumb stating that everyone learns differently is important yet taken for granted. The one who knows should ask himself or herself, what is the best way for me to share this with another? The one who needs to know should suggest this is the way I understand most easily; can you help me in this fashion or that fashion? Sound simplistic? Yet in much of the traditional workplace experience of the researcher, there is a weak connection between trainer and trainee, coach and teammate, supervisor and subordinate, and teacher and student. Success suffers. This study suggests from the rules-of-thumb collected it takes time and desire to be able to read people, to get to know people, to build trusting relationships, to build confidence, and to be able to successfully

support people. From this study a strong recommendation to workforce education

professionals is to help the workforce connect with each other, to develop positive and

productive workplace relationships. Why? Because as the rule TCRT 167 suggests in its

context: "Talk to them other than they're just the body there that has to move these

numbers."

From the perspective of this researcher, the time has come to focus more on the

person behind the body; as a person with human needs and then on the numbers, metrics,

or goals. This thought was a reflection upon the count of 14 rules-of-thumb describing

success and the balance of 286 rules-of-thumb describing how building a positive sharing

relationship brought about success. Positive human-to-human relationships are

important.

Regarding classroom education the participants of this study suggested teachers

and classroom education influenced their view of what works. Consider these TC rules-

of-thumb once again, all initiated from teachers in the classroom experience:

TCRT-57   Don't assume the person knows what you know.

TCRT-58   Don't assume the person knows anything about the subject.

TCRT-59   What I know is a learned experience.

TCRT-60   Your first opinion of people can make or break a relationship.

TCRT-61   Step back and see the whole picture.

TCRT-62   Some people do better with freedom and responsibility.

TCRT-63   You can teach someone faster going to their mental level.

TCRT-64   You can teach someone faster going to their physical level (sit/stand/squat).

TCRT-65   Some people learn slower, some people learn faster.

TCRT-66   Ask people what way they learn better.

TCRT-67   Let people have options. Let people make choices.

TCRT-68   Don't be afraid to come out and say, do you understand?

TCRT-69   Be able to adjust your style.

TCRT-70   Ask questions, see if understanding is taking place. Do you know what I mean?

Teachers and the classroom environment instilled these rules within the TCs. Teachers, instructors, facilitators, and any person involved in the domain of teaching and knowledge sharing must be strongly aware of the impact of their thoughts, words, and deeds on others.

Consider these two points. First, realize the above rules, and others within this study are transcontextual and apply across domains. We are speaking of classroom education and that includes any setting where humans gather to learn: school, work, play, and even home. Second, by reviewing those TC rules-of-thumb, all collected from individuals who make a living in the workplace sharing what they know with others, it is easy to see that teachers had an influence on how these individuals informally developed rules for learning relationships, enabling or disabling sharing and learning. Both teachers and students may find it valuable to collect the personal rules-of-thumb from each other in the attempt to foster a learning environment and learning relationship. With the collective set of rules-of-thumb both a teacher and student may come to know more of the whole person – the whole teacher and the whole student – and thus develop a more positive and productive relationship.

Regarding implications toward the marketplace consider this. If the buyers and sellers in the marketplace understood how to fully support the other, positives outcomes

for both should occur. Collecting and exchanging rules-of-thumbs between buyers and sellers could prove very productive. Each would know what works when engaging with the other.

For example, this study investigated a organization with the goal of delivering customer service. The study explored the experiences of individuals using personal rules-of-thumb to help others deliver customer service successfully. But, would it not be interesting to explore the rules-of-thumb of the customer regarding what it is like for him or her to seek and receive successful customer service? As one participant said, "it's hard to feel for the customer when they are screaming at you." Perhaps if the customer knew the screaming was a distraction the screaming would stop. Knowing what works or rules-of-thumb regarding human relationships in the marketplace is valuable.

Finally, the implications for me, the researcher, are as follows. Rules-of-thumb appear to be every where and in every situation. Wherever I look I see rules-of-thumb. However rules-of-thumb appear taken for granted, buried deep in the mind and actions of a person, or between the lines of text. It takes time to tease out what works for others and what may work for me and for you. But after this study, the time spent collecting and exploring rules-of-thumb on a daily basis, regardless of the topic is time well spent. As a researcher, my curiosity regarding rules of what works is endless.

Perhaps my learning style is, "show me what works for you" and let me try it and see what happens for me. Share that experience with me. And, I'll share my experience with you and we both learn. Reflecting upon my repertoire of rules-of-thumb is an ongoing, endless, and personal pursuit. From this study, coming to know both the hard and soft rules-of-thumb of others is priceless to me. Personally my interest is in soft rules.

Researcher's Reflections

Researcher's Lessons Learned

What did the researcher learn from conducting this study? The following reflections express what the researcher learned regarding the strengths and limitations of chosing a case study method, the value of the study, the opportunities and possibilities created from this study, and finally what the researcher would do differently when engaged in a future case study.

What were the strengths of a case study method for this research? The researcher believed the case study design provided a bounded context of place, time, people, and resources to work within. That said, the researcher felt the study was doable, manageable, and afforded an opportunity for deep exploration of the phenomenon of interest. The case study's nature allowed the exploration of the phenomenon in its natural setting fixed in the real-life environment of the workplace. The case study's descriptive nature illuminated insights and meanings of the phenomenon explored expanding the knowledge base of the researcher, perhaps the readers, and perhaps related fields of science. The unique and particular insights and illuminated descriptions and interpretations gleaned from an in-depth study of a particular case creates new knowledge, be it only from this single case. The strength of the case study method lies in its deep, personal, and focused yet flexible way of study and in its purpose to provide a rich descriptive account to expand understanding of the phenomenon explored.

However, because of the case study's deep, personal, and focused yet flexible way of study, limitations or weaknesses appear. First, one must accept the notion that this study is one particular case and to generalize the findings of this single case to the

population becomes problematic. From this present case study the researcher believes this one particular case created for him a foundation of knowledge to build upon, to add knowledge to, to ponder, to question, to study, and to shape future research. And perhaps this particular case adds incremental knowledge to the knowledge base of others as well. For him, the researcher has learned much.

The question then to ask is, how and what can one learn from a particular case? From focused in-depth data collection over a period of time, with a distinct group of individual participants, set in a unique workplace setting, with the purpose of exploring, describing, and interpreting the phenomenon of interest, the researcher gained a new practical deep understanding that he could share with others. This particular case study allowed the researcher to become aware of the complex relationships that existed within a setting bounded by time, place, people, and resources as he studied the experience of technical coaches using rules-of-thumb to share personal knowledge in the workplace. This particular case study became the spring board for this researcher to continue to investigate the notions surrounding rules-of-thumb, knowledge sharing, tacit knowledge, technical coaches, and the like. Can we learn from a particular case? Yes. As Stake (2000) suggests we learn vicariously from a single case through the researcher's description and then through personal comparison of this particular case with others the readers have encountered. He goes on to add that the readers will then reconstruct the knowledge in ways that are meaningful to them and thus learn from the particular. Upon personal reflection, the researcher agrees with Stake.

Considering the paragraphs above and the mention of the words/concepts of limitations and weakness raises another concern, personal bias. The researcher learned,

in the construction of this section of another strong personal bias; his discomfort with the words/concepts of limitations and weakness. All of his life he has seen opportunities, possibilities, and potential success instead of limitations and weakness. He does not think or act within the realm of limitations or weakness. At one point during the interview process he found interesting how several individuals would rather speak of the word/concept of success than of survival. Discussing limitations and weaknesses appear to trouble this researcher in a similar way. Both of these examples were beyond the scope of this study but, the notion of a personal bias is not. Thus, the problem of personal bias arises as a possible weakness or limitation during an in-depth case study. The researcher made every attempt to address his bias to himself during the study and to the reader of this document; even now. Why? The researcher is a part of this case study. The researcher collects the data, analyzes the data, describes, and interprets the data. The presence of the researcher is potentially both a strength and a limitation to the study. A strength because of the researcher's unique perspective and predisposition. A limitation because of the researcher's unique perspective and predisposition. However, this researcher considers this case study unique because of his presence. The personal subjectivity of him and others possibly expressed within the case makes this a unique case. Again, this was a particular case. It was a single instance. It describes a phenomenon of interest from the experiences of the participants through the understandings of the researcher using the best of his abilities. It is that uniqueness, describing insights and illuminations possibly previously unnoticed or not known or perhaps described differently which adds to the knowledge base of a field. That is the belief and another lesson learned by this researcher.

Continuing on, the researcher now reflects upon his experience with case study being credible and trustworthy as a method. How does one provide credibility and trustworthiness within a case study research project? Beyond the strategies to provide credibility and trustworthiness outlined in Chapter 3, the researcher felt strongly that his narrative descriptive account of the study and the findings would offer a credible case and trustworthy study. At this point the researcher suggests a case study provides value though its detailed description of the phenomenon studied. But how much description and what manner of description? Of what? To what extent? He was not sure. Said simply "how much description and what kind of description?" The researcher considers this a limitation to case study research; how much description is necessary and what kind of description is necessary? The researcher could not find any hard and fast rules for the amount of detail required, type or style of description, or what descriptions to put in or take out. He had to trust his intuition and capability to provide what he felt offered an authentic account of this particular case. Does one follow the rule "less is more" or "more is better" or "do the best you can with what you have and what you know?" All that said, in addition to the time for preparation, observation, interviewing, transcription, analysis, and reporting, case study research required sufficient time to reflect and decide how to present a credible and trustworthy study.

In reflection, time becomes a potential limitation. How much time did this case study require? In reflection of this case study time was a pressing issue. However, again recognizing the researcher as an important part of this case study, one must recognize that time was relative to his personal life. He was not a full-time researcher. He had family, academic, and business responsibilities in addition to being responsible for this research

project. Time management was of great importance. As the researcher found out during this study, life changes one's timetable without notice. The time required for an in-depth credible and trustworthy case study is significant.

For example, the researcher encountered meeting academic institutional deadlines, accommodating the meeting times of affiliated individuals and participants, and allowing time for reflection and production, all require attention. Within an in-depth case study, one must question the resource of time available for preparation, collection, analysis, and description of the phenomenon studied. Again, remember the researcher was not a full-time researcher and thus he could only spend a proportion of his time dedicated to this project. However, consider the time spent engaged in this case study. This researcher estimates spending approximately 6 months in case preparation, 9 months in data collection, transcription, and initial analysis, 24 months indwelling within the massive amount of data and gaining understanding and finally 6 months in the construction and re-construction of this final product – this report. The amount of time spent by this researcher in conducting this case study was considerable. If sufficient time is not available for an in-depth case study, that may be a concern, a limitation and thus cause a weak final product. Although the researcher was concerned with 'how much' time he was devoting to this case study, and feeling at various intervals this study was like running a marathon, he continued to the end. At this end he is satisfied with his product.

Being at the end, what lessons did the researcher learn of the value of the case study method and of this particular study? As suggested earlier, the researcher believes the strength of the case study method lies in its deep, personal, unique, and focused yet

flexible way of studying a phenomenon and describing that phenomenon. It was the intent at the onset of this study to begin building a foundation of knowledge for the researcher. This foundation of insights would direct his future research regarding his interests relating to rules-of-thumb, tacit knowledge, and knowledge sharing. This case study allowed the researcher to explore deep into the experiences of participants sharing knowledge while using rules-of-thumb. In doing so, the researcher found much. He believes this case study thus added to theory and to practice.

For example, one important lesson realized by this researcher of this case study was that by supporting theory, one adds to theory. Perhaps it was a hope of the researcher to find a brilliant new insight. However the researcher realized at the culmination of the study that the one brilliant insight was, with this unique study, this case supported existing theory as mentioned earlier in this chapter. It was though reflections upon the strengths of conducting a single case study the researcher understood that from his unique, personal, and in-depth approach within a distinct context, he added knowledge to the knowledge base within related fields. This case study did not generalize to populations. This study added insights to an existing field of knowledge illuminating opportunities and possibilities for future study and growth.

Regarding support and addition to theory, for example, the findings supported the characteristics of rules-of-thumb previously suggested by others who studied rules-of-thumb. However, this study suggested the transcontextual nature of rules-of-thumb deserves consideration. Also, regarding the theoretical framework guiding this study, this case suggested rules-of-thumb support the SECI model as it represents Socialization, Externalization, and Internalization. However, this case adds to theory as this particular

case did not observe or encounter Combination during the study and that finding deserves

further consideration. Also considering this unique case of exploring a particular

workplace role – technical coach – and describing this particular relationship and

experience with the phenomenon of interest adds insight and illumination to present

theory, particularly from the contextual narratives derived from the 300 rules-of-thumb

describing the experience of technical coaches using rules-of-thumb when sharing

knowledge. From these examples and from the discussion earlier within this chapter, the

researcher now understands and believes more profoundly how this particular case

supports and adds to theory.

Regarding adding value to practice, this case study provides insights regarding

human knowledge sharing within workplace. The descriptive narratives of rules-of-

thumb offer the reader an opportunity to take away insights and develop personal

understandings that possibly promote learning and growth. This case study offers 300,

unique to this case, rules-of-thumb from the participants studied. This collection does not

generalize any findings to other populations but it does open itself to personal study,

learning, and growth from the unique perspective offered. The researcher believes this

particular case offers ways for readers or practitioners to expand their experiences by

reflection upon the findings within this unique case. For example consider a rule-of-

thumb unique to this case:

TCRT-171   Don't start someone's day off bad news.

> When I approach a lot of my team in the morning if I know there's
> something big going on I might say how are you doing. Instead of me
> walking up and saying okay, here's your up-to-date stats. You're call time
> is really terrible. What am I doing to them for the rest of the day? If they're
> already feeling bad it's the first thing I'm throwing at them. They know
> about it and some point in the day I will be mentioning it and we will be

working on it. But to start the day off like that! It's not going to help them get their times down. They are going to be miserable and not want to take calls. And it's going to make it worse (TC).

That rule-of-thumb, unique to this case, offers insights and potentially expands one's experiences in personally tacit ways. From this study, the researcher learned that by sharing these insights, he does not attempt to set precedents for one's practice; he does not want to create a universal principle applying to the experience of using rules-of-thumb; he simply desires to offer new knowledge for addition to one's existing set of experiences in the realm of workplace knowledge. In doing so the researcher learned this study offered opportunities and possibilities for additional learning, sharing, and growth for him and others. Before moving on, consider this insight gleaned from this study: the more rules-of-thumb a TC had the more puzzles (problems) he or she could solve. That thought does not create a universal principle, but it does provide one with something to ponder, reflect upon, and put to practice in one's own personal way.

Also, from conducting a case study, the researcher realized that he is comfortable in the uncontrolled, unpredictable, emerging, and open environment found within a qualitative case study. The researcher sees the value of deep thorough rich description as a very plausible opportunity for personal learning and growth. As one may notice, the researcher is "wordy" but that is who he is. It is what he brings to a case. And it is that unique perspective that offers and illuminates new knowledge, to those who chose to participate with him, with his style, and with his interests. The researcher sees case study research as an opportunity for growth. Within this case study the researcher listed 48 researcher rules-of-thumb to provide a footing for future studies. Perhaps some of these insights may provide assistance and direction to others who engage in similar research.

Also, from this case study, the researcher desires to refine and improve his case study competencies and continue to grow in this venue.

What would the researcher do differently? Reflecting upon the time, the effort, the resources, the conditions, and all aspects of this case study and then considering this product the researcher asks himself the following questions. Could he have done better? Perhaps. Could he have been more efficient? Perhaps. Could he have come to the same outcome and product in a more robust yet simpler and faster way? Perhaps. Within this document the researcher listed 48 researcher rules-of-thumb created by him and for him as a researcher during this project. He produced these personal rules to provide him and others, with touchstones pointing to what one needs to know or do within a study such as this. He seeks continuous improvement as a researcher. What the researcher would do differently the next time is reflect upon these rules, which he did not have before this study, and do his best to improve his capacity with each. This case study provides a point of reference for comparison to future case study research actions. The researcher embodied the experience of conducting this case study. He can and certainly will grow in the understanding and expertise of conducting future similar research.

Those reflections provided the researcher with a wonderful lesson learned from the case study method. That lesson is, the case study value lies in its opportunity to gain a full and deep understanding of a particular experience. That understanding offers insights to the research method used, the processes involved, and the findings and outcomes revealed. And that understanding is available in as much or as little as one desires.

In summary, what lessons did the researcher learn from conducting this study? He learned the case study method is a valuable research resource for providing deep understanding of a particular phenomenon and then pointing to future research opportunities. He learned that one learns much from a particular study and the insights and illuminations found expand one's personal knowledge as well as the knowledge base of a field. He learned that within the case study method exist potential limitations such as the case study should not set precedents, create universals, or attempt to generalize from a particular case. Also, personal bias and resource requirements may present limitations. Regarding resources, time was a resource element deserving much attention in future endeavors. That all said, the researcher ultimately learned it is a given he desires to improve in his research capacity. It is a given he is a novice on the path to expert within the case study method. It is a given only through practice, trial and error, more experience, more reflection, and more learning and sharing will the researcher grow in expertise in the case study method. What would the researcher do differently? He would only continue engaging in more case studies and continue learning, sharing, and growing from each.

Researcher's Final Thoughts

As a final section within the researcher's reflection let us consider the next question. What was the essence of this study and its inspiration to me in terms of the value of the knowledge and future directions of my professional-personal life?

Now I speak as the person behind the researcher. For me, the essence of this study was understanding of the experience of using a rule-of-thumb when sharing knowledge by recognizing five entities. These entities are: the individual, the

community, sharing, reflection, and connection. First, I recognized the individual had

infinite interpretations of what life meant to himself or herself and what worked for him

or her to expand and enjoy that life. Second, I recognized the individual was part of a

community where he or she drew experiences from and shared experiences with, either

individual community members or the community at large. Third, I recognized sharing

was instinctively offering what works or conversely what didn't work if no solution was

available. Sharing was giving of one's self or one's experiences to another. That

happens in person-to-person and person-to-persons interplay of talking, observing,

showing, and doing all with the intent of offering what works in a particular situation to

bring about a desired outcome. Next, I recognized the individual must have time for

indwelling or reflection on all that he or she experienced allowing the adoption of what

works, the rule-of-thumb, to become truly part of that person's repertoire of knowledge.

Finally, rules-of-thumb connected the individual with all of his or her

interpretations of life with the community of individuals and back again, sharing a quest

to expand life in a positive way. Perhaps that is why we developed our own individual

rules-of-thumb yet others are able to easily relate to them as well. I would offer rules-of-

thumb connected us as humans to a source of infinite common successes. And that

connection was made between individuals explicitly or implicitly.

Before this study the thought of viewing a collection of transcontextual rules-of-

thumb had not occurred to me. The presentation of rules-of-thumb as a collective whole

had the most impact upon me. This finding alone suggested the importance of collecting,

creating, and presenting a profile of people, roles, and tasks by offering the rules-of-

thumb that were the antecedents to present capacity and future potential.

Perhaps soft rules-of-thumb were always deeply within us and we needed to remind each other of what it was we already knew. Perhaps we shared life's experiences in some deep unconscious meaningful way as part of the community of man. Perhaps that was why we nodded and smiled and related to each other's rules.

That said, what was it like to use rules-of-thumb when sharing what we know? The use of a rule-of-thumb provided the experience of revealing or illuminating a positive success-oriented part of the whole. The experience was one that points the way to being whole and complete.

The rule-of-thumb was a part of our being. As we illuminated more parts of our whole capacity, our potential grew. And most importantly those parts, rules-of-thumb, came from life experiences. More life experiences created more personal growth and more rules-of-thumb; suggesting one should live outside of one's comfort zone.

A single rule-of-thumb conveyed a single capacity or future potential of success for an individual, whereas a collective set of rules-of-thumb conveyed a larger perspective or view of that person's capacity or success. Knowing more enabled doing and being more.

Indwelling, internalization, and reflection were of utmost importance to this study. This report emerged as the product of indwelling, internalization, and reflection within the thoughts, words, and deeds of the TCs. After over two years of indwelling within the life experiences of the TCs, a conversion of information to knowledge happened and I became able to share this story.

Finally, with regard to my future, "do what you love and love what you do!" is my personal rule-of-thumb. I've embodied that life experience deep within me and

continuously use it to expand my life. My love is to collect and share what works. My current livelihood is doing just that. This work is taking me into many diverse settings. My projects thus far have been collecting and sharing rules-of-thumb in workshops related to the following workplace concepts: coaching, assertiveness, time management, decision-making, teambuilding, and interpersonal communications. A project of collecting rules-of-thumb within the trucking industry regarding turnover resulted in the publication of a business book on how to reduce driver turnover. Beyond the workplace, my endeavors enabled me to collect and share the rules-of-thumb found in river-based salmon fishing. And now my endeavors with this phenomenon are driving me to collect and share rules-of-thumb regarding Optimism, Harmony, and Personal Growth as each exists within the workplace. As I said, my professional life and personal life both benefit from the fulfillment of collecting and sharing personal rules-of-thumb regarding living and enjoying life. Current projects now include collecting and sharing the rules-of-thumb necessary to recycle a house as it relates to the 'Green' phenomenon.

As you can see, the concept of rules-of-thumb is the driver behind my intentions and actions, currently and into the foreseeable future. This study provided me with a foundation to infinitely build upon and for that I am grateful.

Summary and Conclusion

Sharing rules-of-thumb with another was sharing parts of the sum total of one's life experiences. Each shared rule-of-thumb was a part of a one's life experience. A collective set of shared rules-of-thumb created a glimpse into one's life. This study allowed us to peek into the life world of TCs as they worked, sharing what they know. We came to know them better because they shared their personal rules-of-thumb with us.

Finally, it was my intention that this document give you an experience of what it was like to use rules-of-thumb when sharing knowledge rather than just read about what that experience was like. I am grateful for all involved on this journey. Thank you.

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APPENDIX A

CORRESPONDENCE

- Overview Script to be Emailed to Site Director

- Overview: Exploring the Experiences of Technical Coaches using Rules-of-Thumb

- Script to Recruit Participants

- Study Introduction and Conclusion Scripts

Overview Script to be Emailed to Site Director

Dear [Site Director],

Thank you for granting me access to your company for my doctoral research project. I've attached three documents for your review. The first document is an overview document of my study: Exploring the Experiences of Technical Coaches using Rules-of-Thumb. Please review it. Upon your approval, we can meet and work out the timeline and particular details of identifying participants. The second document is a script that will be used to recruit Technical Coach participants. The third document is an informed consent form to be reviewed and signed by each participant prior to their activity.

I will contact you within a week to answer any questions you may have and to schedule a time to begin setting the project in motion.

Thank you for your participation,

Stan Poduch, PhD Candidate, Pennsylvania State University
Ph: XXXX   Email: XXXX

Overview: Exploring the Experiences of Technical Coaches using Rules-of-Thumb

Overview
The research topic is *Rule-of-Thumb,* a form of tacit knowledge. A Rule-of-Thumb is a general personal rule or rough guideline frequently used in the conveyance of personal knowledge. A Technical Coach a.k.a. a subject matter expert, has deeply embedded personal knowledge formed by past experiences; therefore, the study's interest is in the Technical Coach's experience with sharing a rule-of-thumb.

Research Question
What is the experience of using rules-of-thumb like for a Technical Coach when sharing knowledge?

Participants
The study seeks no more than 10 Technical Coaches who share their knowledge and have experienced the use of rule-of-thumb or general rule. This is a case study and as such, the Technical Coaches work in a common environment/location. Their role is supporting others by providing guidance collected from their expertise and experience. Each participant must have experienced this phenomenon—rule-of-thumb. Most, if not all Technical Coaches experts have experienced and use general rules.

Method
The study is qualitative. Data collection is from individual observations and interviews. The researcher observes the participants as they share their knowledge and notes times when a rule-of-thumb or a general rule is used. The observation is with each participant for one day. Afterward, at an appropriate time, the Technical Coach participates in an in-depth interview process. Three interviews are required. Each interview is about 60 minutes and spaced one (1) week apart. Here we discuss the experience of using a rule-of-thumb in depth. The interviews are audio-recorded and transcribed by the Principal Investigator.

Strict measures to ensure confidentiality for participants and data are adhered to. Only the Principal Investigator, Stanley P. Poduch will have access to raw data and transcriptions.

Timeline
The researcher will work with the most convenient time for the company and participants. The anticipated start is in November 2005 and completion within one year.

The End Product
The research produces a narrative which describes the experience of using rules-of-thumb or general rules by a Technical Coach. Employee education, training and development, technical and succession planning, and a host of other applications benefit from understanding how this form of tacit personal knowledge—a rule-of-thumb—enables knowledge transfer. The study will be published as a doctoral dissertation.
Contact: Stan Poduch, PhD Candidate, Pennsylvania State University Ph: XXXX
Email: XXXX

Script to Recruit Participants.
Introduced to participants by Site Director

Dear [Participant],

On behalf of Stan Poduch, Doctoral Candidate, Penn State University…Thank you for your interest and possible participation in my dissertation research on the experience of using rules-of-thumb to share knowledge.

Participation in this project is voluntary. The criteria: you must be a Technical Coach and you must have experienced the use of a rule-of-thumb. A rule-of-thumb is a general personal rule or rough guideline used in decision-making, troubleshooting, and sharing knowledge with other individuals. The level of involvement is this: you will be observed/shadowed for about a full day and noted when you use a rule-of-thumb. Afterward at a convenient time, you will participate in an in-depth interview process. We will talk about your experience with a rule-of-thumb three (3) times for about sixty (60) minutes each session. You will share the details you select concerning earlier experiences you may have had with using rules-of-thumb, then we will discuss the rules-of-thumb you used during observation, and finally we will discuss your reflections on the meaning of rule-of-thumb. Your interviews will be audio-recorded and transcribed. I, Stan Poduch, will be solely responsible for the recordings and transcriptions and will insure complete confidentiality for you and your company. To participate, you will need to sign an informed consent form and meet the criteria of having experienced the use of a rule-of-thumb.

Thank you very much for your interest. I value your participation and your time, energy, and effort in helping me understand the experiences of using a rule-of-thumb.

Thanks again,
Stan Poduch

Study Introduction:

To be read to the participant after the informed consent form is signed and collected; and before the observation and actual research begins.

This purpose of this project is to gain a deeper understanding of what an individual experiences when sharing knowledge. The study explores the experience of using *Rule-of-Thumb,* a form of tacit knowledge, to pass on personal knowledge to another individual. Rule-of-Thumb is a general personal rule or rough guideline frequently used in the conveyance of personal knowledge. We are studying this topic because research appears to overlook or take for granted the use of *Rule-of-Thumb* within the realm of knowledge sharing.

The project focuses upon you, a Technical Coach (TC) and your experience when sharing knowledge. In this context, you are a subject-matter-expert with the role of assisting others in troubleshooting, decision-making, and completing work tasks. You are a knowledge support person. As such, you have deeply embedded personal knowledge formed by past experiences; therefore, the study's interest is in your experience, and what that experience is like when sharing a rule-of-thumb to support another individual.

As a reminder, all raw data collected will be kept confidential for you and your company's protection.

Do you have any questions before we begin?

Study Conclusion:

To be read to the participant after the completion of the final interview.

Thank you for your time, energy, and effort in working with me to understand what the experience of using a rule-of-thumb is like. I truly value your participation in this study and your willingness to share your experiences and time with me. If you have any questions and/or concerns please do not hesitate to contact me. Should I have any questions which may arise during my analysis, I would like the permission to contact you and discuss my questions at a mutually convenient time.

Again, thank you very much.
Stan Poduch

APPENDIX B

FORMS

- Informed Consent Form for Social Science Research

INFORMED CONSENT FORM FOR SOCIAL SCIENCE RESEARCH
The Pennsylvania State University

Title of Project: Exploring the Experiences of Technical Coaches using Rules-of-Thumb

Principal
Investigator: Stanley P. Poduch (Doctoral Student)
ADDRESS: XXXX
TELEPHONE: XXXX
EMAIL: XXXX

Faculty Advisor: Dr. William J. Rothwell
Department of Learning and Performance Systems
The Pennsylvania State University
301A Keller Building University Park, PA 16802
TELEPHONE: 814.863.2581
EMAIL: wjr9@psu.edu

1. **Purpose of the Study:** The purpose of this research is to gain a deeper understanding of what an individual experiences when sharing knowledge. The study explores the experience of using a *Rule-of-Thumb* to pass on personal knowledge to another individual. A Rule-of-Thumb is a general personal rule or rough guideline.

2. **Procedures to be followed:** An introductory statement regarding the purpose and process of the study will be read. Observation occurs for approximately one (1) day to note times when a rule-of-thumb is used, followed by participation in three (3) interviews lasting about sixty (60) minutes each. The interviews are spaced one (1) week apart. You will be given instructions prior to the interview. The interviews will discuss your experience when using a rule-of-thumb. **The interviews will be audio-recorded and transcribed.** You will receive a summary report of the transcription to review and edit if necessary. The Principal Investigator will be the only person with access to the recordings and transcriptions. The recordings and transcripts are kept and secured by the Principal Investigator. All recordings and transcriptions will be destroyed in November 2009.

3. **Discomforts and Risks:** There are no risks involved in participating in this research other than those associated with everyday life. You may select the experiences you wish to share. You may end your participation at any time by telling the Principal Investigator.

4. **Benefits:** The participants may gain a new awareness about personal knowledge, their professional capacity as a Technical Coach, and themselves from reflection about this

5. **Duration/Time:** The observations will be for approximately one (1) day. There are three interviews scheduled lasting about sixty (60) minutes each, scheduled about one (1) week apart.

6. **Statement of Confidentiality:** The Principal Investigator assures confidentiality with the following activities: (a) only the Principal Investigator will have access to the raw data and transcriptions; (b) both audio-recordings and transcribed documents will be stored in a locked safe at the residence of the Principal Investigator; (c) all data will be destroyed by November 2009 or on the three year anniversary date of the expiration of IRB approval for this project; (d) the observations and interviews will be labeled with letters A, B, C, etc. Only the Principal Investigator will have access to the inventory of which observation and interview belong to which participant; (e) any and all personal identifiers which may have been recorded will be deleted following transcription ensuring further confidentiality; (f) individual names will not be linked to responses in any future publications or presentations; and (g) The Office for Research Protections may review records related to this project.

7. **Right to Ask Questions:** Participants have the right to ask questions and have those questions answered. All questions should be directed to Stanley P. Poduch, the Principal Investigator (contact information above). If you have questions as a research participant contact Penn State Office of Research Protection – 814.865.1775.

8. **Compensation:** None

9. **Voluntary Participation:** Participation is voluntary. Participants can withdraw from the study at any time by notifying the principal investigator. Participants can decline to answer specific questions.

You must be 18 years of age or older to consent to participate in this research study. If you consent to participate in this research study and to the terms above, please sign your name and indicate the date below. You will be given a copy of this consent form to keep for your records.

_____   _____
Participant Signature   Date

I, the undersigned, verify that the above informed consent procedure has been followed.

_____   _____
Investigator Signature   Date

APPENDIX C

PROTOCOLS

- Interview Protocol

- Observation Protocol

Interview Protocol

The Interview Protocol follows the method of in-depth interviewing by Seidman in his book *interviewing as Qualitative Research: A Guide for Researchers in Education and the Social Science*. The interviews are semi-structured.

The interview is a three interview series. Each interview lasts at least 60 minutes. Each interview is spaced approximately one week apart. Each interview has a different focus. These are the tentative starting questions.

Interview 1: Focused life history

The purpose of this interview is to reconstruct earlier experiences with the topic being studied.

Questions: How did you come about to use and recognize rules-of-thumb?
Please reconstruct earlier experiences of using rules-of-thumb.
How were you feeling?
What were you thinking?
What were you doing?
Where were you?
Who were you with?

 Interview 2: The Current Experience

The purpose of this interview is to concentrate on concrete details of the present experience(s) in this case during the observation.

Questions: Please reconstruct the [noted experience] experiences of using rules-of-thumb.
How were you feeling?
What were you thinking?
What were you doing?
Where were you?
Who were you with?

Interview 3: Reflections on Meaning

The purpose of this interview is to reflect on the meaning(s) of their experience.

Questions: Given what you have said about your history with rules-of-thumb and what you have said about your current experience, how do you understand rules-of-thumb in your life?   What sense does it make to you?
Given what you have reconstructed in these interviews (refer to notes for prompts) where do you see yourself regarding rules-of-thumb in your future?

Observation Protocol

The purpose of observation is to note when the participant uses a rule-of-thumb.
The researcher will focus only upon the words, actions, and activities of the Technical
Coach and how they share their knowledge via rule-of-thumb.

Date of Observation		
	Descriptive Notes	Reflective Notes
Rule-of-thumb noted		
What was being done-(task)		
When during task was rule noted:		
How rule was shared		
Verbal cues (if-then)		
Action cues (hands-on activity)		
Resources used by TC		

APPENDIX D

PERMISSIONS

- Copyright Permission

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Regarding Permission to use: Figure 1. Four modes of knowledge conversion. (Nonaka & Takeuchi, 1995, p. 62).

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Stanley P. Poduch Jr.

Stan Poduch is President of S2 Inc., a firm dedicated to self development of the
individual within the workplace, the marketplace, and the classroom. His current focus is
collecting and passing on rules-of-thumb and creating rules-of-thumb for self
development and sustainability in the workplace. Workshops created and delivered by
Stan via S2 Inc include the following:

- Coaching & Coaching UpHill: Practical Rules

- Workplace Optimism: Practical Rules

- Workplace Harmony: Practical Rules

- Workplace Growth: Practical Rules

- Workplace Persuasion: Practical Rules

- Human-Centered Performance Management: Practical Rules

- Professional Presence for Supervisors: Practical Rules, and

- Professional Presence for Staff: Practical Rules.

Stan received a B.S. Accounting, M.B.A., and M.S. Human Resource
Administration from the University of Scranton, Scranton, Pennsylvania.

Stan is a published author and a student of life. His current projects include
collecting and sharing the rules-of-thumb necessary to deconstruct and recycle a house as
it relates to the "Green" phenomenon and also the research and collection of rules-of-
thumb for the phenomenon "Living the Good Life" as it relates to sustainability and
personal lifestyle.