Exploring the Transfer System. Validating a Process Model with a Business Training
Intervention

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Abstract

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In today's economic landscape, business trainers have a responsibility to deliver

training that translates into individual performance improvement and a positive return on

investment. The inherent purpose of this study is to explore the variables that impact

individual performance in the "transfer system". Interviews with customer service

representatives and the support staff that work alongside them at a Montreal-based call

center depict both anticipated and unanticipated reactions towards factors in the transfer

system that impact individual and team performance. Results focus on learner

perceptions, instructional quality, and peripheral influences, all of which provide the

framework for an updated transfer process model.

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Dedicated to my family and friends

for their continued support, encouragement,

and understanding.

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Introduction

The transfer of learning is the end result educators aspire to achieve in order to give their learners the knowledge and tools to successfully perform what they learn in a different environment. For the most part, delivering instruction that does not offer the possibility for students to carry over knowledge, understanding, and skills to other contexts is seen as unsuccessful. There has been exhaustive research on the topic of transfer of learning; some of which focuses on the tasks and teaching approach used by educators, others focusing on the cognitive state or motivation of learners during and after instruction, and some focusing instead on the context and support systems in place during learning and after when it is subsequently applied. When educators only consider the teaching aspect among the above mentioned topics on this subject, and measure the success of a training initiative uniquely at the conclusion of the training intervention, the potential for learners to fail to transfer what they have learned increases. It is important to consider that training alone cannot anticipate the full range of circumstances that will be encountered in task performance, even if a faithful simulation is in place during the teaching process (Druckman & Bjork, 1994). In order for change to occur through training, certain conditions are necessary. The learner must have a desire to change, know what to do and how to do it, work in the right climate, and be rewarded for this change (Kirkpatrick, 1994). For this reason educators must consider a multitude of factors in what can be referred to as the transfer system (Gauldine & Saks, 2004). Rather than focus on only one characteristic of transfer in isolation of others, the transfer system refers to a process that considers all factors in the person, training, and organization that influence the transfer of learning to job performance (Holton, Bates & Ruona, 2000).

This type of methodology is consistent with a human performance technology (HPT) approach, where a cause analysis is implemented to determine the impact that the work environment and people involved in the organization have on performance (International Society for Performance Improvement, 2010). Rather than assume that a training intervention is the de facto solution to address performance opportunities, the HPT approach obliges the individual in the consultative role to consider that learning programs might not fill the performance gap, because these only address skills and knowledge. In some instances, learners do have the skills and knowledge to handle a task, but still do not perform effectively (Carliner, 2003). An imposing array of other possible individual and workplace factors affect performance. Examples include the state of the economy, poor support systems, dated equipment and tools, and employee attitudes (Stolovich & Keeps, 2004). When assessing job performance and considering elements in the transfer system using an HPT approach, the consultant acknowledges the complexity of an organization and the impact of functionally interconnected components. He or she also recognizes that the effectiveness of each unit depends on how it fits into the system, and the effectiveness of the system depends on the way each unit functions (International Society for Performance Improvement, 2002).

This study explores existing models that outline the transfer system and examines the extent each characteristic in the system impacts the likelihood that learners successfully perform what they learn in a work environment. The exploration of the transfer system takes place by evaluating the significance of each important contributor of the transfer of learning before, during and after training is administered, providing educators insight into the reality of a learner's experience inside and outside of the

classroom. A reflective look at the transfer of learning as a multidimensional and ongoing process from a group of workers in a Montreal-based organization where a learning initiative resulted in a positive return on investment offers a unique insight into what we refer to as the transfer system and allows us to reflect on theoretical models that outline this process.

Literature Review

What is Transfer?

The literal definition of transfer is to convey from one person, place, or situation to another (Merriam-Websters Online Dictionary, 2009). For transfer to occur, a student must first learn some skill or knowledge (Stolovich & Yapi, 2007). Learning in this context is defined as a long term change in behaviour that has the potential to be reproduced in a new setting (Gagné (1985). In an educational context or when discussing learning theory, the term transfer is interpreted as the extent to which learning is communicated from one context to another and the degree to which behaviour will be repeated in a new situation (Detterman, 1993; Cormier & Hagman, 1987). Most formal education aspires to transfer despite the fact that the context of learning for students usually differs markedly from the ultimate contexts of application, especially when they are utilized in a professional position relating to their field of study. (Leberman, McDonald & Doyle, 2006; Perkins, Salomon, 1992).

Despite the acknowledged importance of transfer of learning, educators and managers conclude that it does not occur in many instances. In fact, only a small amount of new learning is actually applied on the job (Hutchins, 2009). While statistics vary

regarding the actual amount learners actually transfer, the data is not encouraging. Despite upwards of $100 billion dollars spent annually on training in America as little as 10% of it actually results in transfer to the job (Baldwin and Ford, 1988; Paradise, 2007). Similar statistics provided by Robinson, as cited in (Broad 1997) note that based on research, an average of 30% of what people learn actually gets used on the job, while Hutchins (2009) claims that less than 40% of knowledge and skills from training experiences are applied by trainees. With statistics such as these, many rightfully wonder if budgets allocated to training are justified. In the private sector, there is surprisingly very little in terms of evaluation of training programs that test the linkage between training and changes in work behaviour; and tests that are implemented fail to show positive changes in individuals and organizations (Faerman & Ban, 1993).

If we were able to discover and engineer transfer, it could potentially liberate students and teachers (Singley & Anderson 1989). However, it is problematic to identify one single factor that can be corrected in order make this happen. Realistically, transfer cannot be studied independently of the system within which the trainee learns and utilizes new skills, and many transfer studies conducted in laboratory settings fail to consider the dynamic factors present over the course of a learner's experience that either inhibit or facilitate it (Foxon, 1997).

The topics highlighted in subsequent areas of this review of literature will discuss the various factors associated with the transfer of learning during its process and illustrate the need to view it as a multifaceted entity. To begin, an exploration into the reasons why transfer is of such importance in both academia and organizational settings will take place.

The Importance of Transfer of Learning

When we assess training and the ability of learners to transfer it to the workplace, we help justify the existence of our training efforts and demonstrate how they contribute to an organization's objectives and goals (Kirkpatrick, 1994). Whether in a business or academic setting, there is an important need on the part of managers and educators to ensure that the transfer of learning is occurring. After all, the ends of education are not achieved unless transfer occurs (Perkins & Salomon, 1992). In the field of corporate training, substantial amounts of money and resources are invested into the training and retraining of personnel, therefore the acquisition of transferable knowledge and skills is an important factor in job performance and cost justification (De Corte, 1999). In today's economic climate, trainers can no longer be satisfied with simply delivering quality training without considering improved performance on the job, even if student post-test scores prove learning took place and participant satisfaction is positive (Wick, Pollock & Jefferson, 2009).

The transfer of learning into productive activity and the active managerial practices required for effective transfer have recently become a focus of research (Bouteiller & Cossette, 2007). With growing budget restrictions, organizations and school boards that fund the ongoing learning efforts of their employees have a need to know that their investment in training will result in actual performance improvements. Interestingly, despite the importance of assessing transfer, only 29% of employers in Quebec evaluate the transfer of learning to the work situation (Bélanger & Robitaille, 2008). When a lack of performance improvement is exhibited by learners, managers often assume the training materials or the trainer is at fault (Broad, 1997). While poor course

design can be a contributing factor to inferior employee performance, it is also possible that learners underachieve because management send the wrong people to training, fail to support them with resources and motivational tools once they return to their job, or ignore other situational variables (Foxon, 1997). Unless transfer is treated as a process, and measured at different stages of a learner's experience, their shortcomings will likely be blamed on training designers or facilitators.

The History of Transfer

The topic of transfer has been studied extensively over the past one hundred years by researchers in a variety of fields. Despite this century of research, there is still a great deal of apprehension about accepting claims that learning does or does not transfer from one environment to another, and the conditions that influence this possibility. In the early part of the 20th century, Thorndike and Woodworth (1901) conducted observation experiments with paper-based shapes, which concluded that "improvement in any single mental function rarely brings about equal improvement in any other function, no matter how similar", as the nature of the data in each case influences one's mental functions. Since this study, there have been hundreds of experiments from different researchers reaffirming the point that transfer between situations that are not similar is difficult to obtain (Detterman, 1993).

In contrast to studies that conclude transfer does not occur, there are those where the results indicate a clear carrying over of learning to a performance situation. In an early study from a period similar the one conducted by Thorndike and Woodworth, Judd and Scholckow performed refraction experiments with fifth and sixth grade boys and concluded in 1908 that "every experience has in it the possibilities of generalization",

supporting the belief that educators should concentrate on teaching broad principles and overviews of concepts rather than specific facts, skills, and beliefs (Barnett & Ceci, 2002; Greeno, Moore & Smith, 1993). A more recent and often cited study that explains successful general transfer was conducted by Gick and Holyoak (1980). This experiment involved college students trying to solve the Duncker radiation problem, which involves the process of eradicating tumours without destroying surrounding tissue. With the explicit aid of a story based analogy, many subjects were able transfer dissimilar knowledge from one context to another and solve the problem. Since Judd and Scholckow's experiments conducted over one hundred years ago, numerous studies have demonstrated that critical thinking can be learned and subsequently transferred to original contexts (Halpern, 1998). As well, it is argued that many studies that fail to exhibit transfer adopt an inappropriately narrow and unrealistic criterion of successful transfer and look for a single and immediate correct answer based on what is told by a teacher (Hatano, Greeno, 1999). Utilizing this approach fails to consider that the learner may internalize the information broadcasted by the instructor and repurpose it in another context or situation in the future.

More recently, transfer has been regarded as a process, especially when considered in a business context, where learners can be influenced prior to a training intervention, during the intervention, and also and afterwards. This differs somewhat from an academic context, where a student can potentially attend a class on a given subject for a set period and not need to immediately apply learned knowledge and skills in a performance environment. The idea of thinking of the transfer of learning as a process allows management to consider intervening factors that affect learners during the

learning itself, but also outside of the learning, where students will most likely decide whether or not to change their behaviour and apply what they learn. As outlined in Figure 1, a host of inhibiting and supporting factors influence the transfer process outside of the actual training intervention. These factors will be explored in greater detail in later sections, followed by a study involving a real-world business case that addressed the process of transfer using many of the variables outlined in figure 1.
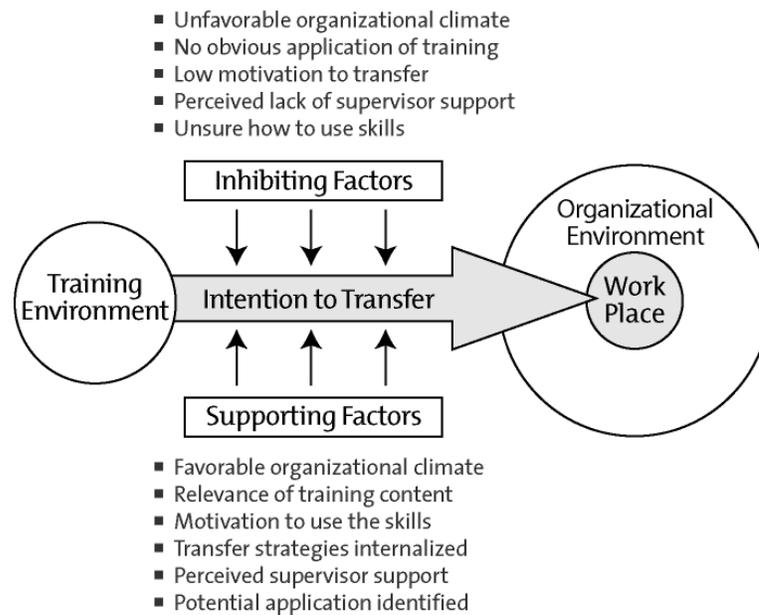
Figure 1. Inhibiting and supporting factors influencing intention to transfer (Foxon, 1993).

Types of Transfer and their Implications

Transfer is defined in different ways, and it is important to make a clear distinction between these types of transfer for this study instead of making broad and general statements. The following section details the different types of transfer that exist in the context of learning.

Positive and Negative Transfer

The transfer of learning is classified differently, depending on the outcome where performance of learned knowledge and skills takes place. Positive transfer occurs when learning in one context improves performance in a different context (Perkins & Solomon, 1992; Druckman & Bjork, 1994). An example of positive transfer is an Anglophone that attends weekly French language instruction, who is later able to correctly interpret some phrases of Spanish dialogue he overhears when on vacation in Mexico since the two languages have similar structures and wording.

Negative transfer occurs when previous learning inhibits or interferes with learning or performance in a new context (Leberman, et al., 2006; Druckman & Bjork, 1994). For example, a tourist that learns the road regulations in a visiting country and becomes accustomed to driving on the left side of the road can encounter performance problems when he returns to his country of origin, and witnesses conflicting road rules and driving methods when he drives his car. Negative transfer is typically only problematic to learners in the early stages of learning a new domain and much less of a concern for educators, since learners correct for the effects of this type of transfer with experience (Perkins & Solomon, 1992). In the context of the site at the center of this study, the focus is on positive transfer, as general performance scores already point to this outcome. However, interview questions validate whether or not participants ever experienced negative transfer and if newly acquired skills conflicted with previous abilities.

Near and Far Transfer

The distinction used between near and far transfer refers to the closeness or distance between the original learning and the transfer task (Leberman, et al., 2006). Near

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transfer occurs when students engage in problems that are very similar to the problems they worked on during the learning phase (Gick & Holyoak, 1987). When learners engage in training where near transfer is the objective, it usually involves tasks that are procedural. An example of near transfer is a student driver learning to operate a small vehicle and using this knowledge to drive a larger truck that has similar features. Teaching for near transfer often results in students being unable to reach beyond a very narrow context in the performance environment. In the work environment chosen for this study, educators typically try to teach students knowledge and skills that can be applied to a variety of scenarios, and not simply a narrow situation where automaticity is encouraged. Much like the academic world, it is not uncommon in our work environment to hear of students performing well on exams yet failing to understand real-world examples of the very same subject matter at a later time when they leave the classroom since they are unable to generalize information (Kneppers, Elshout-Mohr, Boxtel, & Hout-Wolters, 2007). When considering human performance, if developed skills do not transfer beyond the training context, much of the investment may be considered wasted (Druckman & Bjork, 1994). Interestingly, Schmidt and Bjork (1992) argue that characteristics of near transfer such as immediate retention and information acquisition have a detrimental effect on long range transfer, or far transfer.

Far transfer occurs when learners are able to decontextualize prior learning and apply it to a novel situation in which there does not appear to be obvious similarities with the original learning setting (Stolovich & Yapi, 1997). An example of far transfer is a mathematics student that always looks for alternatives to her calculations to achieve the best possible answer to a problem, and in her personal life uses this same tactic when

making investments to see if better returns can be obtained with her funds (Leberman, et al., 2006). Essentially, once knowledge or skills are learned in a situation, they can be performed in a multitude of contexts and not only the immediate environment in which they were taught. Educators and policymakers are most concerned with this type of transfer since there is an expectation that what is taught in schools is generally applicable over time and contexts, and not only immediately following instruction in the same learning environment (Barnett & Ceci, 2002). However, considerable research illustrates that far transfer is particularly hard to achieve (Perkins & Grotzer, 1997). Pressley et al. (1987) contend that based on empirical evidence, generalizable, context independent skills and strategies that can be trained in one context and transferred to other domains are a matter of wishful thinking. This is due in part to student's general inability to see connections between the things they learn and the situations they encounter in the outside world (Mayer & Wittrock, 1996). In the context of this study, interview questions set out to discover whether explicit strategies by staff are used to assist students in making these far transfer connections, and whether learners' metacognitive strategies help them achieve improved performance results.

Low Road and High Road Transfer

Salomon and Perkins (1999) describe low road transfer as the spontaneous, automatic transfer of highly practiced skills, with little need for reflective thinking. Analyzing this type of transfer is unreliable when applied in many educational contexts, unless the performance task is truly identical and it can be duplicated without any modification. For our purposes in this study, we must consider that cognitive tasks take place in specific contexts that possesses unique attributes and cannot be treated as literal

and uniform (Lave, 1988). Rather, the context of a call center and the environmental variables that encompass it, such as the nature of each individual call are very essential and possesses many qualities unlike the learning environment, requiring learners to adapt accordingly.

Unlike its low road counterpart, high road transfer does not involve rote learning to enable students to perform automatic tasks, but rather depends on deliberate mindful and reflective abstraction of skill or knowledge from one context for application in another (Perkins & Solomon, 1988). The high road view of transfer is of greatest interest to this researcher as it more closely relates to the reality of participants and the context in this project. Learners in this study are not able to transfer what they learn in a reflexive manner and be successful at their job, and instead must strategically reflect, synthesize and usually repurpose what they learn prior to it being applied to unique situations.

Within high road transfer, a further distinction exists between forward reaching high road transfer and backward reaching high road transfer. Forward reaching high road transfer involves abstracting knowledge and skills from a learning situation in preparation for applications to potential contexts elsewhere. Backward reaching high road transfer involves abstracting key characteristics in a problem situation and reaching backwards into one's experience for knowledge and skills that match the current circumstances (Perkins & Solomon, 1988). Each of these views is explored from learners in this study, in an attempt to uncover their impact on performance.

Self Regulation in Transfer

Not all transfer and performance outcomes can be attributed to the instructor and course composition. In an attempt to uncover the reasons that training either succeeds or

fails to transfer, project stakeholders often instinctively point to instructors and training departments for their perceived ability or inability to design instruction and properly manage classrooms in a way that leads to performance improvement. While factors attributable to educators are always worthy of investigation, the failure to transfer also results from behaviour that consciously or unconsciously occurs with the learner. A condition required for a change in learner behaviour is first the desire to change on the part of this person (Kirkpatrick, 1994). If educators are to offer courses that meet the needs of learners, then an understanding of not only what they transfer from their courses is important, but also the individual metacognitive and motivational strategies that students employ to help them achieve this needs to be explored.

The Role of Motivation in the Transfer of Learning

Alongside pedagogical strategies used to design courseware and teach students, instructional designers and teachers sometimes encounter additional enabling or inhibiting factors in their learners. One of these factors is the motivation of learners, which plays a role in their own educational readiness and subsequent transfer of knowledge, skills, and attitudes to other settings. In studies concerning the interrelationship of knowledge, interest, and recall in a subject, results indicate that knowledge and individual interest are strongly correlated and that they are both high among proficient learners (Alexander, Jetton, & Kulikowich, 1995). For example, at the research site chosen for this study, an identical training program on a software upgrade used in the call center can provoke inconsistent reactions from different audiences that use it. A group that experiences difficulty with tasks in the current version of the program will likely be highly motivated to learn the functionality and impacts of the new upgrade,

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whereas the reaction from a group that resents this change will be dissimilar and likely

result in a lack of motivation to learn. Transfer of learning is positively affected if

trainees believe that the training received will be useful on the job and that they will have

the opportunity and support to apply what they learn (Seyler, Holton, Bates, Burnett, &

Carvalho, 1998; Tracey, Hinkin, Tannenbaum, Mathieu, 2001).

Student characteristics in the form of anxiety and apprehensive behaviour can also

have a significant impact on learning and transfer. When a learner has low self-esteem,

lacks confidence and has the impression that he will be unable to keep pace with others in

the class even before training has begun, his or her motivation and stress levels

negatively impact learning. Based on findings that highlight a significant negative

correlation between anxiety and transfer, Park and Wentling (2007) suggest employing

pre-training interventions to lessen student anxiety. This type of preparation for learners

is explored with customer service representatives and their managers during this study,

observing interventions that take place prior to training, such as communications to

employees, team meetings and other strategies used to alleviate anxiety and help learners

enjoy early success. As outlined further in the methodology section, the motivation of

learners in this study was considered after a needs assessment. This assessment

concluded that a series of steps executed in parallel that influence both the intrinsic and

extrinsic motivation of a predominantly generation Y workforce were necessary if

transfer was to occur and be sustained.

Intrinsic and Extrinsic Variables

In business settings similar to the one studied in this project, management often

decides to inject additional incentives to motivate participants to learn and successfully

transfer as quickly and efficiently as possible. Matching the right incentive to any given

job or operating area is crucial to experiencing desired results (Bouloutian, 2009). Unlike

the educational system, rewards often involve monetary compensation in the form of

bonuses, allocated to individuals who complete tasks that contribute to increased revenue

for the organization. The goal of establishing rewards is to encourage behaviour that

leads to the completion of these tasks and engage individuals that might not otherwise be

motivated to participate in the organization-wide endeavours. These extrinsic motivators

appear commonsensical when observed superficially, as each dollar invested in employee

bonuses results in a business return, usually in the form of recurring revenue from

customers. However, studies demonstrate that extrinsic motivation is not sustainable, as it

slowly vanishes when the reward stays at equivalent levels and often completely

disappears if the reward is removed or lessened. In a study involving young children,

Lepper, Greene, and Nisbett (1973) concluded that subjects in an expected- reward

condition would show less subsequent intrinsic interest in the target activity than subjects

that either had no knowledge of an upcoming reward or received no reward at all.

Since extrinsic motivators need to be allocated with care, management may

attempt to create a work environment and job conditions which intrinsically motivate

their employees. An employee that is intrinsically motivated will diligently perform her

job because it results in personal satisfaction and the achievement of internal goals. For

example, in this call center environment, a customer service representative might

undertake individual research on the topic of data, as this knowledge will result in greater

job satisfaction and reduced stress, while providing a sense of personal achievement.

This same agent may still seek an extrinsic motivator if one is available, though it will

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not likely be the factor that keeps her motivated on a long term basis. Therefore, managers must consider the personal goals of their employees, and attempt to balance these with organizational objectives. If an individual's personal goals are in conflict with the goals of the job, team, department, or organization, the individual will likely place a higher priority on her personal plans than on the organization's goals (Bouloutian, 2009).

Many motivating factors were present during the data initiative, and are uncovered in this study. While monetary compensation is a motivating factor for many, other factors which can intrinsically motivate performers are also present. Some of these intrinsic factors are consistent with the reasons Malone and Lepper (1987) outline as essential, including challenge, curiosity, and control, which engage learners for no reward other than the interest and enjoyment that accompanies them. Participants are probed on how these internal and external rewards positively and negatively impact their motivation to perform.

Motivating and Managing Millennials

Every generation of learners has its own culture and influences that make it unique. While many of these traits are seemingly subtle, they often result in substantial differences in the style in which the people of that generation learn (Rowe, 2007). Young people born in the 1980's, as well as a good part of the 1990's, dubbed Generation Y or Millennials, were raised in North America during a time of relative affluence. Members of this generation are highly confident about their knowledge abilities, creativity, and leadership potential, and challenge traditional approaches to recruitment, hiring, training, development, and retention among the companies they work for. Unlike previous generations of workers who took it upon themselves to integrate into their workplace

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cultures, Millennials carry along their beliefs, values, preferences, and technological tools to work, and expect employers to adapt to each (BSG Concours, 2007).

The personal computer, Internet, cell phones, and video games have always been a presence in the lives of Millennials at home and in their schools, and the list of technologies they have to choose from is extensive. For this reason, it is not surprising that technology is often assumed to be a part of the natural learning environment for this age group. After all, Internet use for purposes of school work, employment, and leisure increases as the mean age of groups that are studied decreases (Oblinger, 2003). In the workplace, a larger percentage of Millennials acknowledge that the use of social media tools and online collaborative workplaces help them learn material and complete work, versus employees from the Generation X and Baby Boomer generations (Patel, 2010). This shift in using social media and online workspaces to enhance productivity creates a potential need for businesses to integrate them throughout learning and development activities.

At a June 2004 professional development event hosted by the University of Central Florida, students from different age groups reflected on their academic, social, and personal experiences, offering their observations on how higher education might better respond to their technology needs and expectations. Millennial students in this event shared an enthusiasm for the possibilities technologies afford in terms of helping their learning activities and making classes more memorable and meaningful. While academics and business trainers often question the educational worthiness of open websites with multiple collaborators from around the world, Tim, a 22 year old computer science student states that he appreciates online materials, and that one of the resources

he absolutely loves is Wikipedia. He explains, "It is an amazingly useful resource. If, for example, I'm sitting in class and I have my laptop with me and the professor is talking about some topic that I'm not too familiar with, I can look it up on Wikipedia, get a nice definition and information, and go on learning in that lecture. The lecture becomes a lot more meaningful for me" (Aviles, Phillips, Rosenblatt & Vargas, 2005).

Millennials comprise a large percentage of customer service employees at the call center examined during this study. An awareness of information seeking activities and motivators among these employees is a valuable asset that will help better describe the results when discussing the design, development, and implementation of training activities in this environment, as well as the information seeking activities participants engage in after their training is conducted and they are asked to apply what they have learned in their customer interactions.

Metacognitive Strategies in the Transfer of Learning

Bransford and Schwartz (1999) propose a definition of transfer that considers learning an active and constructive process; one which emphasizes the active nature of transfer. As a result, they emphasize preparation for future learning as a major aspect of transfer, and shift much of the focus on the learner's abilities to learn in novel, resource-rich contexts. In the metacognitive view of transfer, the problem solver is seen as an active participant who must recognize the requirements of a new problem, select previously learned specific and general skills that apply to the new problem and then apply these to solve it (Mayer & Whittrock, 1996). Rather than be seen as a static vessel that collects and applies rote information, the learner in this view must manage prior knowledge and use it in unique situations.

The Impact of Learning and Working Environments on Transfer

Information learned in training programs is essentially useless unless organizations make efforts to support and enable the use of it in the workplace (Beale, 1998). Transfer is affected by a system that includes not only trainee characteristics and training design, but also the work environment (Baldwin & Ford, 2003). Although all learners leave the training with some level of intention to transfer, various environmental factors may begin to undermine this motivation almost immediately (Foxon, 1993). Factors including time pressures, insufficient authority, ineffective work processes, and inadequate equipment all contribute to very real obstacles that prevent even the most willing trainee to change (Taylor, 2000). In recent years, transfer researchers have increasingly accepted the impact of situational variables in the workplace on training transfer since training alone seldom achieves the desired performance in learners (Hutchins, 2009; Broad, 1997). Work environment factors such as support, transfer climate, and transfer opportunity are critical factors impacting transfer (Ford & Weissbein, 1997). For these reasons, studies of transfer of learning that are conducted uniquely in laboratory settings are likely to exclude important factors that facilitate or inhibit this phenomena. Since transfer is a multifaceted process, it cannot be studied outside of the system within which the learner studies and uses new skills (Foxon, 1997).

In an organizational study aimed to provide insight into supervisor support on transfer of training, Nijman, Nijhof, Wognum, and Veldkamp (2006) conclude that supervisors could have the greatest impact on learner performance by improving the transfer climate. Trainees that perceive a facilitative and encouraging transfer climate within the organization are more willing to apply new knowledge, skills, and attitudes on

the job. Contrarily, results indicate that direct supervisor support has a negative effect on trainees' motivation to transfer, and as this support increases, employee motivation to transfer decreases. The authors conclude that imposed instrumental support by management could possibly restrict employees' perception of freedom of choice to perform and consequently affect their self-esteem. Since only a small group of individuals was analyzed during the aforementioned study, the findings which are uncovered are also explored at the research site chosen for this study in order to compare the results.

Armed with insights into the impacts of learning and working environments on student performance, this research focuses a third of its questions on trainee experiences after the instructional intervention is conducted on order to gauge the degree to which the above-mentioned factors impact employee willingness and ability to transfer learned information. As well, the specific role that the supervisor occupies during the transfer process is explored by asking participants how management impacted their performance and motivation to perform.

Evidence-Based Transfer – A Present-Day Case Study

In medicine and healthcare, evidence-based medicine derived from research is a well established practice (Hamlin, 2007). This professional practice is now extending beyond the sciences into education and other social science domains. The goal of evidence-based training is to help move training practitioners toward a professional level of practice by incorporating research-based evidence as we recommend training and performance solutions (Clark, 2010). This movement towards evidence-based practices places greater demands on researchers and practitioners to substantiate their findings

(Hutchins, 2009; Foxon, 1997). Such evidence not only informs the profession as a whole, it inherently guides everyday conduct and accountability (Ruark, 2009). As discussed earlier, training is a very expensive undertaking, and it is important to invest resources in instructional methods that will result in performance improvement and avoid methods that are either unproven, or actually disproven (Clark, 2010). Therefore, the consideration of best evidence when working with clients to solve the performance problems in their work environment is vital.

When considering evidence based training in the context of the transfer process, future research should provide an updated collection of organizational case studies that identify transfer practices in organizations and their subsequent results (Hutchins, 2009; Knyphausen-Aufseß, Smukalla & Abt, 2009). For the most part, current research on the transfer of learning process focuses more on the manager and supervisor perceptions, rather than those of participants, especially in terms of long-term impacts that exceed six months (Leberman, et al., 2006). In response to the lack of research that focuses on learner perceptions during the transfer process, this study provides a unique insight into the minds and day-to-day realities of learners after a long-term training solution was administered in a corporate setting. This study takes place in a Canada-wide organization that views the transfer of learning as a multidimensional process when a business need is identified and the buy-in of every employee is needed for it to be fulfilled. The focus is on learner experiences throughout the transfer process, as these experiences are contextualized with statements and anecdotes from support staff that interact with these people.

Research Purpose

Research Questions and Points of Interest

The literature review highlights the necessity to consider the different aspects that influence the transfer of learning. As practitioners we can be aware of this necessity, though still lack a practical model to adhere to when we actually try to gather all the resources required when implementing a training project. Some conceptual models overly complicate the issue; and while the transfer of learning is a process that involves more than just the learner and instructor as stakeholders, it should not represent an impossible feat to accomplish and lack the possibility of practical application. A good starting point for this research is the framework for managing learning transfer systems defined by Holton and Baldwin (2003). This model (figure 2) provides a succinct overview of considerations during a learning intervention without attempting to micromanage those involved at each step. It does not view the learner as an isolated vessel; with only his or her cognitive abilities and motivation as factors that influence the transfer process. Instead, it considers organizational and individual conditions that occur prior to the training intervention and also after.

While this model considers more than factors that occur uniquely during the learning event to define transfer, it does still consider this event as the central activity which all other conditions and competing factors surround. As communicated in the literature review, the details that define steps in the process outside the learning intervention are equally as important as those that take place in the classroom, or online at the student's computer. In a busy corporate climate, a learner's support system or knowledge management tool can actually be of greater importance to them than the actual training, and a transfer model must acknowledge this.
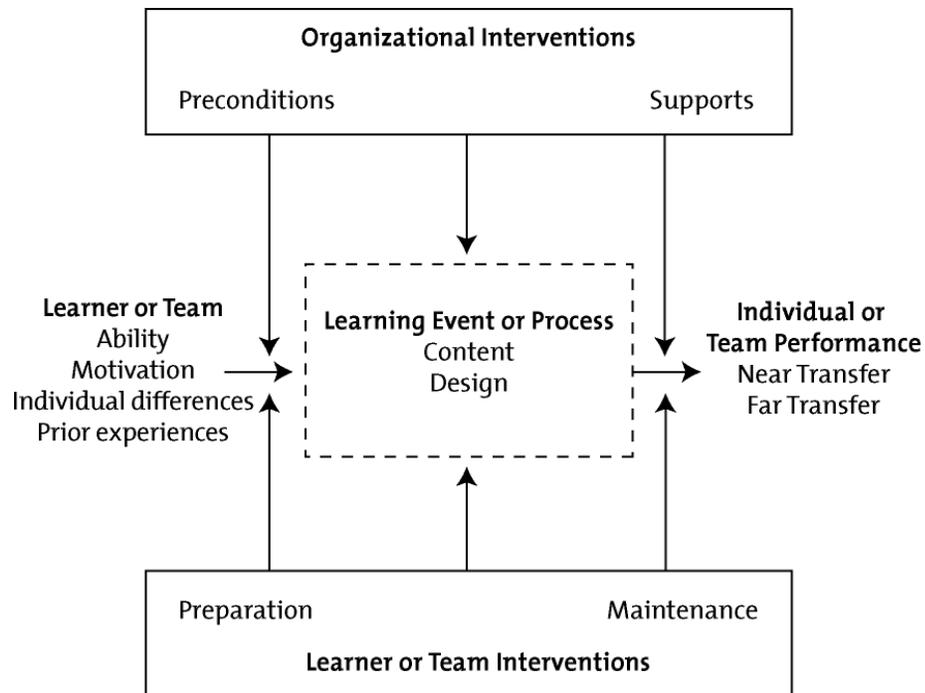
Figure 2. Framework for managing learning transfer systems (Holton and Baldwin, 2003).

In terms of asking practical questions to participants of this study that are more consistent with an organizational climate, the main steps in the value chain for turning learning into results, and the factors that affect success will be considered. These steps are outlined by Wick, et al., (2009) in figure 3, and demonstrate to a greater extent an actual transfer process in a business setting, with a breakdown of tangible steps. This research solicits responses from learners regarding each phase of the transfer process, as well as stakeholders in the organization responsible for supporting the learner at each stage. The diversity in professional roles among participants allows this researcher the opportunity to cross reference findings and consider viewpoints that either reinforce or contradict elements in the transfer process.
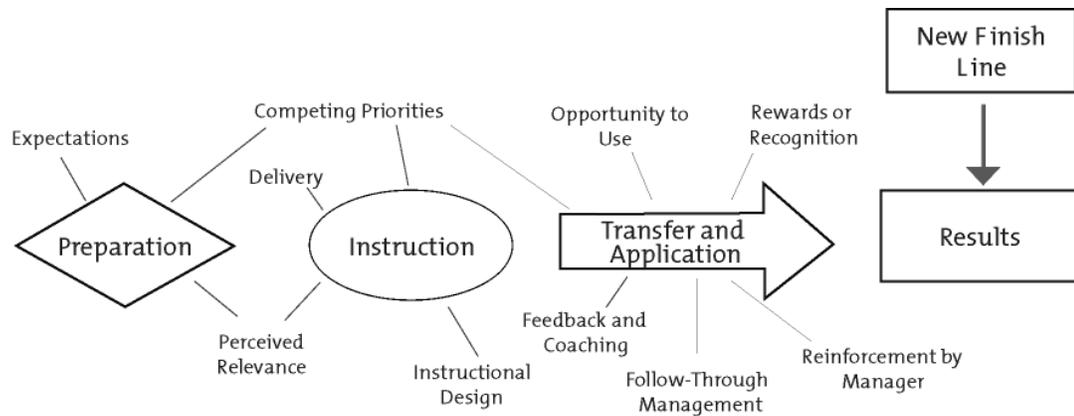
Figure 3. Steps in the value chain for turning learning into results (Wick, et al., 2009)

At the conclusion of this study, when data from a training initiative that spanned a period of over a year is analyzed and validated with stakeholders, this researcher is able to endorse or discredit characteristics of the above model. With analyzed data compiled regarding each step of the transfer process, we are able to rank each characteristic in order of perceived importance based on interviewee perceptions. This provides informative data to educators and training managers seeking a practical transfer model to follow in an organizational setting, and gives them insights into strategies undertaken by an organization that either encourages or inhibits transfer.

Benefits of Research

The purpose of this research is to provide a practical and usable case study that explores parallels between it and theoretical models proposed in education journals. The conclusions derived from this study can provide educators in organizations the validation of a template for implementing their own large-scale training projects. The research provides both a model and a caveat for educators and project owners who might assume that the onus of transfer belongs uniquely to trainees, trainers, or instructional designers.

When practitioners review studies conducted uniquely in laboratory settings, there can be apprehension in accepting and implementing them in organizations. In these controlled settings, return on investment and other factors that determine the success of a project in organizations are usually non-existent. It is data on these factors that is fundamental to guiding management decisions in business environments regarding areas to invest capital allocated to training.

Personal Biases, Influences and Extraneous Variables

While this researcher and those tasked to assist in the data collection activities use strategies to remain neutral and objective throughout the research process, there is still a number of concerns regarding biases and influencing factors which must be addressed. First, as someone that assumes the role of a researcher and instructional designer at the site being studied, this researcher admittedly has assumptions regarding how trainees react to different learning products. As well this researcher has opinions on how they are normally best prepared and supported to be able to transfer learned content to their job. For example, as someone that has both developed and attended training sessions, this researcher is unable to ignore the enthusiasm that learners exhibit when engaged in group work with their peers versus a lecture-based module in which they assume the role of passive listeners. With this in mind, predetermined questions are developed using neutral language based on issues brought forth in the literature review. Emerging themes are explored and elaborated as the research progresses and ideas are proposed by participants or this researcher. As discussed later in the methodology section, the goal in using this approach is that through their answers, the participants will validate and provide themes, which, combined with this researcher's knowledge and viewpoints, present the

foundation for subsequent data collection activities. Therefore, the influence of this researcher, combined with viewpoints provided by participants will balance the direction of the interview activities and the subsequent discussion based on results.

Aside from considering researcher bias, organizational influences that weigh on the responses participants provide are important to address in this type of study. Employees in most organizations are constantly aware of their position related to peers in their department, and also others in the company. With this in mind, it is important to consider that responses provided by participants can be influenced by their position and relationship to others in the organization. For example, a call center agent could be uncomfortable stating that influences originating outside his department that resulted in extrinsically motivating behaviour are more important than influences his own immediate supervisor tries to instil, which might be based more on adopting a culture of teamwork and helping others achieve department-wide goals. As well, this researcher's position as both a researcher and member of the training department at this organization could influence respondents. This influence could result in participants stating facts that praise the quality of training in order to placate myself and create a rapport with my department for their own personal reasons. The complete opposite situation could also occur, where a participant from a customer service group in the organization might be reluctant to admit the benefits that others provide in the transfer process in order to advance his own agenda by praising his work and that of colleagues in his department.

Along with certain preconceived ideas that this researcher possesses, there is also the reality that questionnaires are designed using themes conceived before any data collection activity. Since this study relies on information collected during the literature

review for the basis of the questions asked to participants, there exists some researcher bias, as not all discussions that originate from the participants are truly spontaneous. An effort is made to afford equal relevance to emerging ideas that originate from participants and pre-defined themes, but there is nonetheless some bias present when a priori categorization occurs prior to data collection activities.

Ethical Concerns

As discussed in the previous section, the welfare of participants is a concern, and steps to elicit honest and unencumbered responses on their part are undertaken. With regards to protecting the dignity and rights of the participants, many measures are put in place to ensure that volunteers feel at ease during the data collection activities, and understand their ability to withdraw from the study without fear of reprisal. First, employees interested in participating in this study are met on an individual basis where the research methodology and goals are briefly outlined. It is made clear that the data collection activities are not intended to deceive or mislead them and that they would in no way impact job responsibilities or interfere with work schedules.

As outlined in the Summary Protocol Form for this research project, participants are protected by using pseudonyms in any electronic or paper-based data, including personal notes, audio transcripts, report drafts, and the final report. For each questionnaire and interview transcript created by this researcher, participants are assigned a generic number or pseudonym, known only to the researcher and possible assistant or observer. During the distribution and explanation of the consent form provided to participants, it is explained that this researcher or his work supervisor should be contacted if they have questions or concerns regarding their participation or if they choose to

withdraw. If ceasing all participation in the study is the case, this researcher or the supervisor will simply remove the corresponding data obtained from this participant and seek alternate sources. These steps are employed with the intention of ensuring participants do not fear resentment on the part of the training department, and that their opportunity to perhaps one day gain employment in this group will in no way be compromised if they discontinue their involvement. Since participants are purposefully selected for their specific knowledge and role in the project life cycle, there is no way for them to remain anonymous to the principal researcher. However, their rights and privacy as participants are clearly explained to them prior to any interview and reinforced throughout the project.

Research Method

Research Design and Procedure, Participants, Location

Given the complexity of the transfer process, the research strategy for this study is qualitative in nature. This strategy allows for purposeful sampling, where we intentionally select specific individuals and sites to understand a central phenomenon (Creswell, 2008), which in this case is the identification of the contributing and inhibiting factors in the transfer of learning in the workplace.

Candidates with the following professional titles are selected for questioning regarding their specific role in the organization-wide data initiative:

- Customer service representative
- Instructional designer
- Corporate trainer

- Communications coordinator

- Call center team leader (supervisor)

Participants in this study were recruited through general corporate announcements and e-mails, as well as through colleagues that were able to assist in the identification of potential candidates. Since our role as educators requires us to consider both high and low performers in our courseware development and support, this researcher purposefully recruited learners with varying degrees of success in implementing what he or she was taught. The goal of this approach is not to scrutinize the lower performers and question their abilities, but instead identify the areas in the transfer process where each feels they are adequately supported and steps where they require additional support.

The setting in this research project is a Canada-wide wireless service provider employing approximately 2,000 individuals, including customer service representatives, sales personnel and support staff. Outsourcing agencies also support this organization, and their employees are required to possess the same professional prerequisites and abide by a similar code of conduct, while maintaining a yearly training certification for new products and services. Inbound call centers and front-line sales staff are an important facet of any industry that has a large client base. Competition among different organizations to hire qualified people to work in these environments is aggressive, and the average employee in this line of work can command a respectable salary and enjoy many company benefits at an early stage in their adult lives, all with only a high school diploma. For these reasons, it is an ideal part-time employment opportunity for Cegep and university students or younger workers that are interested in the field of telecommunications. Since job positions in this line of work are plentiful, employees

often move between different organizations if they are unsatisfied with their current work environment, or see the potential for improved compensation and work conditions elsewhere. This high attrition rate means that there is a constant need to train new employees; some arriving from other organizations and others that are completely new to the wireless industry. Initial paid training for these workers spans anywhere from a few days for a sales role, and up to one month for a customer service representative, representing a cost per student of up to five thousand dollars for the organization when all resources are considered.

Along with initial training for all newly hired employees, there is constant ongoing training for new products and services in the ever-evolving telecommunications industry. No employee goes untrained when these new products, procedures, and services are launched, and it is the responsibility of the training department and support staff to ensure they are adequately prepared to answer customer inquiries in stores and across each call center. In these development activities to support learners, support staff is asked by management to carefully balance the needs of the learner with the realities of a store and the call center, where time away from their customers for training means increased overhead and potential staffing issues, all resulting in decreased customer satisfaction. Therefore, the need to provide effective training and subsequent follow-up by managers for products and services that have a very limited shelf life, while consistently achieving rapid results is paramount to competent job performance and a positive return on investment.

Entry and Permission to the Field

In any study conducted in the workplace, access to employees and resources for the purpose of collecting potentially confidential information is a sensitive issue. Each year at the organization chosen for this study, employees are subjected to a code of conduct training session, where it is made abundantly clear that any information relating to products, pricing, processes, and many other areas are strictly confidential, and that respect for this rule is among the most important responsibilities we carry as employees. Therefore, permission to interview employees and negotiate entry to this field of research was a sensitive process. The fact that the principal investigator is employed in this organization made access to the site a possibility, as an outsider attempting to conduct research in this environment would have undoubtedly been met with a negative response.

As an employee tasked to design instruction and provide management with training and performance recommendations, this researcher was able to successfully communicate that this research could potentially help in this responsibility for those involved. As well, the promise of confidentiality for the organization by referring to it only as a Montreal-based call center throughout this study removed any apprehension that sensitive information could be viewed and used for purposes that could put those involved in a compromising position. A condition for involving participants from the workplace in this study was that all data collection activities be conducted on their own time; though meeting room facilities and office supplies were made available for use by this researcher. Since the request for participant time was on a volunteer basis during their personal time, a modest lunch or snacks was provided to those who participated in the study.

Research Methodology

A grounded theory design is appropriate when trying to capture the experiences of participants to explain a process. In this case, the process involves a proposed framework that includes the steps implicating learners in the transfer of knowledge and skills. In order to achieve theoretical saturation, this researcher primarily uses interviews to capture the experiences of individuals, and was not opposed to returning to data sources on numerous occasions for more information throughout the course of the study (Creswell, 2008). The practice of using memos was consistently employed throughout the study to conceptualize incidents, as it offers an optimal way of capturing stream of conscious ideas when participants reveal information. Information obtained from memos in data collection sessions are attributed as much credibility as recorded transcripts or researcher hindsight, as the ideas and interactions in these sessions provide a unique context that cannot be reproduced outside of these activities.

When the first two interviews were complete, the data available in the form of memos and audio transcripts was sorted and categorized in order to create general themes and articulate theories. During this process, original ideas emerged, leading to the creation of even more memos, which influenced the question structure of future data collection activities with study participants. Since this research has constructivist undertones within the context of a grounded theory design, questions for future data collection sessions were also created based on the experiences and interpretations of this researcher.

The research methodology in this study involves interactive and reflexive interviews with key stakeholders in the data transformation initiative at the research site with the goal of exploring individual roles in the transfer of learning process. Rather than

assume the position of a distant expert that is consistent with objectivist versions of grounded theory, where a single reality that a passive, neutral observer discovers through value-free inquiry, the discovered reality outlined in this study arises from an interactive process with this author and the research participants (Charmaz, 2006). The interaction between this researcher and participants provides the data, and therefore the meaning that this researcher observes and defines (Mills, Bonner & Francis, 2006). Instead of assuming that theory emerges uniquely from the data, this researcher categorizes, interprets, and integrates collected data from participants in order to construct a faithful and intriguing story regarding their realities (Charmaz, 2006). As a result, this researcher is able to provide an analytical writing style that is evocative of the experiences of the participants , while still describing them in the most faithful way possible (Mills et al., 2006).

The constructivist grounded theory approach applied in this study does not assume that data speaks for itself, or that the researcher began the study without prior knowledge and theories about the subject (Charmaz, 2006). Instead, this researcher explores an existing organization-wide training initiative that highlights the transfer of learning process, and collaborates with participants in the construction of the data in a reciprocal relationship where their positions, experiences, perspectives, and interactions affect it (Charmaz, 2006). With the data, this researcher is able to integrate context, action, and interpretation to produce dense analysis with explanatory power, rendering participants' experiences into readable interpretations that can be cross-referenced with theoretical transfer models (Charmaz, 2006).

Interview Design

While many preliminary questions were constructed for interview activities, this researcher was open to refining and refocusing inquiry based on the themes and attitudes observed during ongoing contact with participants. This method is consistent with an emerging process in qualitative research where the inquirer lets participants set the direction by allowing questions to change during the research based on their feedback or responses (Creswell, 2008). With this strategy in place, it became evident after two interviews with individual participants that topics other than those proposed in the original transfer system outlined in the literature review should be considered. The subjects of informal learning and peer support came about in these initial interviews and in both cases participants were not prompted to discuss the topics. In interviews with subsequent participants these subjects were explicitly brought forth and interviewees were asked to share their experiences with regards to each.

At the conclusion of all interviewing activities involving participants, this researcher revisited, transcribed, categorized, analysed, and coded the audio recordings from each interview session. With data displayed in a tabular format, it was apparent that certain gaps were present where some participants had little input regarding subjects in the transfer process. To ensure the information was not simply overlooked, audio recordings were revisited and cross referenced with the tabular data until it was determined that gaps did exist. Brief follow-up discussions were scheduled with five participants to address these gaps and ensure they had the opportunity to provide input on subjects they had previously omitted. In most cases, it was determined that participants purposefully refrained from providing extensive input regarding certain topics. They simply had not encountered a situation which would be necessary in order to answer a

specific research question, or were part of a department that did not encounter situations that were relevant to this topic. In instances where participants were able to elaborate on answers that they previously provided, this researcher used simple note taking to capture the essence of their dialogue before repeating and confirming their statements to ensure each was properly captured. In some cases, participants did elaborate on ideas and provided concrete examples to substantiate their statements.

After data from customer service representatives was collected and briefly analyzed, interview questions to support staff were created in a manner that would triangulate the collected responses until theoretical saturation was achieved. Saturation was achieved once this researcher determined that response types did not vary between participants. In some situations, participants all provided similar perceptions and responses on certain topics, leading this researcher to conclude that there was a consensus on the subject. Other topics generated complete disagreement among respondents, and it was determined that personal characteristics of interviewees caused this divergence. In these instances, it was determined that regardless of the number of participants that were interviewed; there would be no consensus on these subjects.

Data Collected and Structure of Analysis

As previously discussed, the goal of this research is to purposefully sample individuals that took part in the learning experience at the research site and validate their statements with the support staff put in place to sustain their development activities. Table 1 outlines the themes explored in this transfer study, and the corresponding questions used to validate each. Follow up questions were used to encourage participants

to expand on provided responses, however, these question prompts are presented in the project appendices only. Abbreviations for professional titles are employed in table 1 and table 2 by applying the following format:

- CSR: Customer Service Representative

- TL: Team Leader

- CT: Corporate Trainer

- ID: Instructional Designer

- CC: Communications Coordinator

As outlined in the table below, many questions were intended to be employed across multiple themes, a process which emulates the transfer process itself, where individual elements of the process often directly and indirectly influence and overlap one another. The extent to which this overlap is prevalent is outlined later in Table 2, where participant responses highlight the fact that elements from the transfer process can potentially influence others. Using questions to cross-validate themes also assists in ensuring that no important inconsistencies are present in student responses which might compromise the validity of collected data. Had glaring inconsistencies been present within a participant interview, this researcher would have been required to schedule follow-up meetings with the goal of clarifying topics, or discarding data relating to the individual if some clarity was not achieved.

Table 1

Transfer Themes and Their Related Questions

Theme(s)	Questions

- Preparation
- Expectations
- Relevance

CSR1, TL1, CT1, ID1: What were you expecting when the whole data transformation project began?
CSR2: How were you prepared for the training offered related to the data initiative? Was this different versus other training you regularly take part in?
CSR4: What was your perceived relevance of the entire data initiative?
TL2: How did operations prepare agents for the data training? Was this different from other training programs they took part in?
ID2: To your knowledge, were participants prepared any differently for the training offered relating to the data initiative versus other training they regularly took part in?
CC1: What was your role in preparing learners for the important events during the data initiatives, such as training, new devices, and incentives?
CC2: What type of message did you try to communicate when the data initiative began, and as it continues today?
CC3: What was you and your department's perceived relevance of the entire data initiative when:
CC4: Regarding rewards and recognition for CSRs, what has been the feedback on the contests (group vs. group data sales), promotions, and performance incentives you have been promoting in e-mails relating to data?

Prior knowledge

CSR3: What prior knowledge or skills relating to data did you have before participating in the data training offered by the organization?
CT2: Based on formal and informal discussions with trainees, what do you believe the average prior knowledge or skill level relating to data was before the data initiative began?
ID3: Could you tell me about how you designed instruction during the data initiative, including conceptual strategies, medium of delivery, and any other factors you feel made it stand out versus previous offerings?

Tools

CSR6: Was training itself offered any differently during the data initiative compared to what you typically see?
CSR8: Once training was complete and you were asked to begin supporting customers in data related issues, were your tools able to support your performance on the job?
CSR11: When you encountered or encounter difficult calls relating to data, what resources or tools help you resolve the call?
TL5: How did you account for the fact that some learners failed to transfer everything they learned in training? Were other tools, resources, or formal and informal meetings were made available to them after training?
TL7: Once training was complete and CSRs were asked to begin supporting customers in data related issues, were their tools able to support their

performance on the job?
CT5: Did you observe students using informal learning tools on the subject of data, or experimenting with personal devices owned by them or their friends?
CT6: Did you account for the fact that some learners would fail to transfer certain things they learned in training?
ID3: Could you tell me about how you designed instruction during the data initiative, including conceptual strategies, medium of delivery, and any other factors you feel made it stand out versus previous offerings?
ID4: With all the different training initiatives offered by our organization, how did you ensure learners took notice in the data modules, and recognize their importance?

Instruction   **CSR6, TL4**: Was training itself offered any differently during the data initiative compared to what you typically see?
TL5: How did you account for the fact that some learners failed to transfer everything they learned in training? Were other tools, resources, or formal and informal meetings made available to them after training?
CT4: Was the online and in-class training itself offered any differently during the data initiative compared to what you typically see?
CT5: Did you observe students using informal learning tools on the subject of data, or experimenting with personal devices owned by them or their friends?
CT7: There was an expectation that learners would have the opportunity to immediately use learned information and skills regarding data on the job. With this in mind, what was your approach in delivering your training on this subject?
ID3: Could you tell me about how you designed instruction during the data initiative, including conceptual strategies, medium of delivery, and any other factors you feel made it stand out versus previous offerings?
ID5: There an expectation that learners would have the opportunity to immediately use learned information and skills regarding data on the job. With this in mind, what was your approach in designing your training products on this subject?
ID6: When training feedback from operations and sales started making its way back to you, did this impact the way you designed subsequent training products?

- Informal learning
- Information seeking

CSR6: Was training itself offered any differently during the data initiative compared to what you typically see?
CSR8: Once training was complete and you were asked to begin supporting

customers in data related issues, were your tools able to support your performance on the job?

CSR9: How were you supported or encouraged by team leaders, coaches, and colleagues after the training related to the data initiative was offered?

TL5: How did you account for the fact that some learners failed to transfer everything they learned in training? Were other tools, resources, or formal and informal meetings made available to them after training?

TL6: As CSRs completed the data training, did they have the opportunity to use what they were being taught on the job? Do you believe this influenced their participation in team huddles on the subject of data?

TL7: Once training was complete and CSRs were asked to begin supporting customers in data related issues, were their tools able to support their performance on the job?

CT5: Did you observe students using informal learning tools on the subject of data, or experimenting with personal devices owned by them or their friends?

CT6: Did you account for the fact that some learners would fail to transfer certain things they learned in training?

ID3: I know this is a very general question, but could you tell me about how you designed instruction during the data initiative, including conceptual strategies, medium of delivery, and any other factors you feel made it stand out versus previous offerings?

ID6: When training feedback from operations and sales started making its way back to you, did this impact the way you designed subsequent training products?

- Opportunity
- Priorities

CSR4: What was your perceived relevance of the entire data initiative?

CSR5: You undoubtedly had and still have other priorities on top of data training and data issues. With all these competing priorities, did you devote more attention to data issues? If yes, can you explain when and why?

CSR7: Did you have the opportunity to use what you were being taught on the job? How did this affect your desire to take other training courses on data and actively participate in team huddles on the subject?

TL3: CSRs undoubtedly had and still have other priorities on top of data training and data issues. With all these competing priorities, did you encourage them to devote more attention to data issues? If yes, can you explain when and why?

TL6: As CSRs completed the data training, did they have the opportunity to use what they were being taught on the job? Do you believe this influenced their participation in team huddles on the subject of data?

CT7: There was an expectation that learners would have the opportunity to immediately use learned information and skills regarding data on the job. With this in mind, what was your approach in delivering your training on this subject?

TL5: How did you account for the fact that some learners failed to transfer

everything they learned in training? Were other tools, resources, or formal and informal meetings made available to them after training?

Support	**CSR2**: How were you prepared for the training offered related to the data initiative? Was this different versus other training you regularly take part in? **CSR7**: Did you have the opportunity to use what you were being taught on the job? How did this affect your desire to take other training courses on data and actively participate in team huddles on the subject? **CSR9**: How were you supported or encouraged by team leaders, coaches, and colleagues after the training related to the data initiative was offered? **CSR11**: When you encountered or encounter difficult calls relating to data, what resources or tools help you resolve the call? **TL5:** How did you account for the fact that some learners failed to transfer everything they learned in training? Were other tools, resources, or formal and informal meetings made available to them after training? **TL6**: As CSRs completed the data training, did they have the opportunity to use what they were being taught on the job? Do you believe this influenced their participation in team huddles on the subject of data? **TL7**: Once training was complete and CSRs were asked to begin supporting customers in data related issues, were their tools able to support their performance on the job? **TL8**: When difficult calls starting coming in on the subject of data, how important was peer coaching and CSRs assisting each other in an informal manner on data related issues? **CT6**: Did you account for the fact that some learners would fail to transfer certain things they learned in training? **ID5**: There an expectation that learners would have the opportunity to immediately use learned information and skills regarding data on the job. With this in mind, what was your approach in designing your training products on this subject?
• Extrinsic Motivation • Intrinsic Motivation	**CSR4**: What was your perceived relevance of the entire data initiative? **CSR5**: You undoubtedly had and still have other priorities on top of data training and data issues. With all these competing priorities, did you devote more attention to data issues? If yes, can you explain when and why? **CSR7**: Did you have the opportunity to use what you were being taught on the job? How did this affect your desire to take other training courses on data and actively participate in team huddles on the subject? **CSR9**: How were you supported or encouraged by team leaders, coaches, and colleagues after the training related to the data initiative was offered? **CSR10**: What role did rewards and recognition have on your job-related

performance after you took part in data training?

TL1, CT1, ID1: What were you expecting when the whole data transformation project began?

TL2: How did operations prepare agents for the data training? Was this different from other training programs they took part in?

TL3: CSRs undoubtedly had and still have other priorities on top of data training and data issues. With all these competing priorities, did you encourage them to devote more attention to data issues? If yes, can you explain when and why?

TL8: When difficult calls starting coming in on the subject of data, how important was peer coaching and CSRs assisting each other in an informal manner on data related issues?

TL9: What role did rewards and recognition have on CSRs job-related performance after they took part in data training?

ID4: With all the different training initiatives offered by our organization, how did you ensure learners took notice in the data modules, and recognize their importance?

CC1: What was your role in preparing learners for the important events during the data initiatives, such as training, new devices, and incentives?

CC4: Regarding rewards and recognition for CSRs, what has been the feedback on the contests (group vs. group data sales), promotions, and performance incentives you have been promoting in e-mails relating to data?

CC5: Did people on the call center floor or management provide any feedback to your department about your role in raising awareness and helping learners sell and support data?

The questions outlined in Table 1 generated approximately eight hours of audio content, recorded over the course of fourteen individual interviews, and thirty pages of handwritten notes which were documented during interviews and follow-up discussions with participants. Themes and codes pertaining to the transfer process were present at the outset of the data analysis, and participant statements pertaining to each were logged. Statements communicating experiences and outlooks on topics that were innovative and not in the original scope of analysis emerged; and each was attributed a corresponding code which was validated during the analysis of subsequent interview sessions. If a new code was not corroborated by other participants, and was deemed to be an extreme

deviation from the mean, it was set aside in a separate document where it could be either
discarded or reconsidered at a later date.

Table 2 depicts the validation and development of themes using an emic
approach. Although this researcher asked questions to participants that were based on
existing transfer models, the data relating to each code was derived directly from
participants' responses. By employing a constructivist grounded theory approach,
existing themes were used as a reference point for question development. Consistent with
this research approach, these themes evolved or were developed throughout the research
process and were occasionally revised as interviews with participants progressed. For
simplicity purposes, questions are not included in the table that follows, though can be
referenced by consulting Table 1. The following table provides a succinct overview of
responses provided by participants that took part in this study. Only recurring opinions
and responses are presented in this table, while repetitive statements which do not
provide added insight are omitted.

Table 2

Theme Validation and Development Process

Theme(s)	Questions	Responses	Codes confirmed or developed
• Preparation • Expectations • Relevance	CSR1, CSR2, CSR4, TL1, TL2, CT1, ID1, ID2,	• Open forums caught my eye; they discuss what's going on. • He was talking about data being one important thing that the company was going to concentrate on. • It was pretty much the plasma screens and the little kiosks. • People had no choice but to see it	• Communication • Visibility • Customers • Technology • Incentives • Confidence • Uncertainty

	CC1, CC2, CC3, CC4	• I kept seeing it in the e-mails and my coaches were always telling me about it. • The preparation did come from the customer, asking and demanding for those services. • Even before the training, we were getting data calls. • The money incentives communicated the importance of data to agents. • I saw all the bonuses people were receiving. • I saw how technology was evolving. It was a new method of communication. • If you look at other providers in the U.S. and overseas, a lot of them had data already and it was a great success. • I expected to have less confidence in projecting it to the customer. • We didn't really know what impact it would have on us. • I never really got into it.	
Prior knowledge	CSR3, CT2, ID3	• I had no idea what they were talking about. • I actually gave the training on it to the support groups. • I also worked in Information Technology, so I knew what they were talking about. • My knowledge was pretty low. I wasn't sure if it was the same thing as computer data. • I don't think I even knew data did exist on phones. • I was maybe one notch over beginner, but nothing close to technical support. • I'm familiar with data. • Data was used on the computer, but on a handset I had to learn and didn't know anything. • Using a Blackberry is one thing, but doing troubleshooting for a customer on the phone is something different.	• Expert • Beginner • Computer reference • Knowing vs. Supporting
Tools	CSR6,	• It just becomes memorized at one point. It's	• Memorization

| | CSR8, CSR11, TL5, TL7, CT5, CT6, ID3, ID4 | not really a tool to work with.
• Sometimes more is not enough.
• It took them forever to come up with a page.
• It was very important for them to have specific information.
• They went with the incentives first.
• It's been over a year now so it's better.
• The info was not thorough, and as agents we didn't provide them feedback.
• The standard tool is not helping us for these newer devices.
• It was really difficult because we wanted to answer correctly.
• It would just send you to the Apple web page. We didn't know what it was.
• Some agents weren't even able to access the Apple website.
• For his first-level troubleshooting, he really doesn't have much that can help him.
• It is kind of there, but you read it once, then you read it twice... but you're still not sure.
• We don't know where to go.
• The tool that we use to calculate data that is online is a really great tool.
• They don't go and they don't want to have a customer online and browse. | • Information dump
• Priorities
• Ownership
• Will
• Direction
• Ambiguous
• Practicality
• Information seeking
• Multitasking |
| Instruction | CSR6, TL4, TL5, CT4, CT5, CT7, ID3, ID5, ID6 | • I'm not sure if an online session would be the thing to go for that kind of service.
• What I found beneficial was when they pulled us into class.
• It made me understand the relevance to customers.
• It's hard to visualize what it looks like if I've never seen it.
• Something in your face that you can actually play with to see exactly what the customer sees.
• When you actually play with the phone it changes your perspective.
• If I just read, ok I'll read and I'll understand, but I have to have a scenario where it's live. | • Conceptual
• Visual
• Hands-on
• Relevance
• Hardware
• Interactive
• Confidence
• Exploration |

- I am someone who is visual and I have to see the things in order to learn.
- Hands-on is king. At least once so you know what you're helping the customer on.
- After we completed the training, we were already more at ease during the next call we took on data.
- When the phones came out, we didn't even have the training yet.
- It was very visual, which is different from a lot of training we get sometimes.
- That kind of training, it's not top down. You interact with it and you have to figure things out like a video game in some ways.
- They put a lot of investment into developing that training because there was a lot more visual and videos. They tried to make it fun and interactive
- The format of the 3 hour training was structured in a way that made it easily transferable.
- It was interactive, and it was fun to do.
- Once you can see it, and see it step-by-step, it's a lot more explanatory.
- There was a big need for training, and people would argue to get into it.

• Informal learning • Information seeking	CSR6, CSR8, CSR9, TL5, TL6, TL7, CT5, CT6, ID3, ID6	• I go to a colleague for Blackberry issues. He shows me using his Blackberry. • One of my colleagues had an unlocked iPhone, so whenever I was getting a call, I would get up and go see him. • We have requested handsets for our group so we can experiment on our own. • People will basically go to the person that was able to help them the last time. • I feel if the info here is untrustworthy, I looked at the BlackBerry site. • When I'm not satisfied with the answer, I'll go to someone else and ask it again. • They were asking me the path on the phone, so I would go see for myself.	• Colleagues • Hardware • Community • Confirmation • Initiative • Resourceful • Sharing • Control

- We had a whole bunch of handsets so we could test.
- You could Google it and have a whole bunch of Forums, because somewhere in the world, someone had the same issue.
- If the issue is with the iPhone, I use my own iPhone.
- When the Windows Mobile phones came out, CSRs were passing them back and forth on the floor.
- They also had the telephone bar at the front.
- There was a huge cleanup at one point and they locked all the workstations.
- They used what they needed to use.

- Opportunity - Priorities	CSR4, CSR5, CSR7, TL3, TL6, CT7, ID5	- The pressure came a lot more from the customer than from my management. - It was high priority and you had to learn it. - We did not have enough time to forget it. - The moment you took the training, you were immediately more at ease on the following call. - It might be better taking the training a bit after the crisis, cause you're like "ok I need to know that cause a lot of the customers are asking about that. - I spent more attention on data when I figured out I could make more money off it. - If we don't get a call from a customer based on what we just learned, obviously we're not going to remember it. - We had a lot of opportunities to repeat what we were just taught, so it became very useful. - It wasn't because of desire that we mentioned it, but instead of necessity. - We had no choice; we were exposed to that on an everyday basis. - It was more reactive than proactive because we are dealing with the incoming calls. - The stuff that I picked up helped me sell right away.	- Customers - Business need - Necessity - Time - Product - Preparation - Foresight - Rewards

Support	CSR2, CSR7, CSR9, CSR11, TL5, TL6, TL7, TL8, CT6, ID5	• The calls were there so they had to use it. They had to be more informed about it because that's what every second customer was calling about.	
		• It was more through colleagues.	• Peers
		• I get so much assistance from the people around me.	• Scaffold
		• Coaches now are less asked to know the hands-on, than to know the management skills.	• Delegate • Hardware
		• Coaches did not have time for us because they were overwhelmed.	• Collaboration • Proximity
		• My team leader understands, but he's not the expert; and what I like about him is he's nice enough not to make it up.	• Equality • Credibility • Comfort
		• He knew that we wanted to learn.	
		• He finds an expert in his team.	
		• My coach has developed an environment where we are constantly in training, because we learn from our problems.	
		• That was an ongoing training we developed ourselves.	
		• They don't feel it is garbage information or top-down coming to them. It's straight level information.	
		• A 20 year old might not want to see his boss. Whereas if a guy who is 25 understands it, it's easier to get close and personal.	
		• Peer to peer is the best way.	
		• The guy that really understood data went around and spent a half an hour with everyone on my team.	
		• I used to talk about it with everyone on my team. I would say, "look, it's really easy".	
		• Our support was consulting the people who had the iPhone.	
		• We were always able to help each other out and figure things out in a team meeting.	
		• We had more of a group discussion about these things in our meetings.	
		• Some CSRs make clinics where they would	

come in and sit down in every team meeting.

Extrinsic Motivation	CSR4, CSR5, CSR7, CSR9, CSR10, TL1, TL2, TL3, TL8, TL9, CT1, ID1, ID4, CC1, CC4, CC5	• Humans are not always honest. Once you give incentives, people start cheating. • If you push it on the customer and give your employees incentives to sell it, then that is a push. • If you give me a reason to push, I'll push. • I didn't feel that I was offering something that was necessarily better for the customer. I was offering something that was better for me. • I admit, with incentives like that, you talk about it. • When CSRs really started selling data was when they added a ten dollar incentive. • My sales are part of my solution. • If they ask me the question, I'll offer the services, but I'm not going to be pushing a service. • I'm not sure if it motivated them to understand. • In terms of actively participating, that's more when the incentives came in. • Since they removed it, it's been less of a priority. • They won't give it much thought if there is no money. • Sales went down as CSRs had no push, no reason anymore to go ahead and do it. • Why am I not getting paid? • Hey I want part of that.	• Sustainability • Dishonesty • Aggressive • Unforeseen • Rejection • Unfair • Jealousy • Focus • Self
Intrinsic Motivation	CSR4, CSR5, CSR7, CSR9, CSR10, TL1, TL2,	• Our team leader was very encouraging. • You wanted to learn it and be able to apply it. • We are team driven. • He had us work as a team so we could learn from each other. • We don't feel it's the boss that's pushing	• Positive environment • Teams • Peer • Energy • Pride • Initiative

TL3, TL8, TL9, CT1, ID1, ID4, CC1, CC4, CC5	you. • Strengthened the bond in our team in terms of energy. • Team leaders could put their stats up on their cubicles and create a bit of a competition between their team members. • She would send e-mails to the whole team, saying "guys, congratulations". • We would go play around with the calculator a bit... and make scenarios for ourselves. • They asked me to do side by side with people for sales. • My team leader will say "hey, can you take 15 minutes and explain it to them". • We would get our heads together and figure something out. • Some CSRs make clinics	• Contribution • Problem solving

In the table outlined above, statements from study participants within individual themes are often aligned and serve to reinforce each other, whereas others deviate from each other and provide inconsistencies in participant perceptions. In the following section, anecdotal incidents reflective of the presented data are discussed in the context of views examined in the review of literature.

Results and Discussion

Analysis of data was carried out using a constructivist grounded theory/triangulation approach to identify and validate trends within customer service representative and support staff perceptions. Interview questions were used as the

foundation of this study, and therefore were employed as a means to structure narrative responses and the consequent analysis.

<p style="text-align:center">*The Impact of Opportunity to Transfer*</p>

The review of literature pertaining to motivation highlights how the transfer of learning is positively affected if trainees believe that the training received will be useful on the job and they will have the opportunity and support to apply what they learn. The question put forth to participants in this study was whether they had the opportunity to use learned material, and how or if this motivated them to perform in their job and also enrol in future training programs on the subject of data.

The lack of opportunity to immediately utilize what is learned in a call center environment is commonplace when such a large and constantly evolving catalogue of training programs needs to be implemented to front line staff. Due to the realities surrounding the coordination of employee calendars, scheduling personnel must often enrol participants in training programs that highlight new products, systems, and procedures that might not necessarily be utilized or implemented for up to "a month or two later". When this occurs, the likelihood that agents forget important information for even basic procedures increases. Examples of the difficulty this causes is reiterated by representatives, who state "even though we got our training... if we don't get a call from a customer based on what we just learned, obviously we're not going to remember it", and "something always happens by the time it comes out that makes you forget what you did".

Contrary to situations where significant time elapses between training and application, participants expressed ease in integrating learned content into their daily job

responsibilities when the subject they had recently examined in training was immediately applied on the call center floor. For example, agents displayed satisfaction when they took part in training on a new service and subsequently received inquiries from customers during the same day on this service. Their ability to describe the service and sell it gave them a sense of confidence that was not always possible when days or even weeks elapsed before they applied what they learned. As incentives were introduced to agents for their ability to sell data services to customers, an increasing eagerness to absorb sales strategies present in data training and immediately apply them during customer interactions also became apparent. As one customer service agent explains, "In the training they showed how you can sell it to a customer and how you can make it relevant to them, and I found that useful and was able to sell more straight away because of that". The training department employed a customer-based approach in each data training module in order to enable agents to immediately apply learned content to customer scenarios. One instructional designer states "we put it (customer scenarios) in there too to help them get ready to not only understand it but to apply it in a customer context of selling it and supporting it".

Interestingly the process of applying learned content became even easier when customer service representatives had already fielded calls and questions from customers on the subject of data prior to attending any training on the subject. Taking calls on a topic prior to any training helped agents understand the relevance and importance of the subject matter. Having often handled multiple calls on a subject and initially being unable to answer basic questions for a customer provided a sense of eagerness in agents who did not need to be motivated or persuaded to take part in training and apply what they

learned. One agent went as far as to suggest that "it might be better taking the training a bit after the crisis" because they would likely acknowledge the importance of it, since "a lot of the customers are asking about it". This task of motivating and oftentimes selling the value of a training initiative to learners is usually the responsibility of the instructional designers and trainers who must convince learners of its value by creating activities and scenarios to engage them and obtain their buy-in.

Many examples of customer inquiries on data-related subjects prior to their availability occurred during this data initiative, where knowledgeable customers would inquire about data devices such as smartphones, USB Internet sticks, and Wi-Fi enabled phones before they were actually available on the company's website or in its stores. When this occurred, and agents felt at a disadvantage dealing with customers that were more knowledgeable and insightful on the company's own products and services then they were, the relevance and importance of data training became evident in their eyes. As agents explained, "the customers did prepare us... asking and demanding for those services" and that sometimes they were "more aware about how data works," and as an agent, if "you don't know what you're talking about, then you lose your customer".

Training for Near and Far Transfer

Data collected from participants in a customer service role reiterated their desire to participate in training that allows for far transfer and high road transfer, as agents explained that training which encouraged rote learning was ineffective if considerable time elapsed between learning skills and applying them, or if they were asked to provide support in the form of problem solving and applying learned information to unique scenarios.

In the literature review, significant effort was invested in clearly differentiating near and far transfer and also low road and high road transfer, and their implications in student performance across different settings. In most cases during the data initiative explored in this study, agents had the benefit of being placed in a work environment that allowed them to immediately transfer what was learned, and "not have enough time to forget". This fact is supported by participant statements which include, "the moment you took the training, you were immediately more at ease on the following call," "we had a lot of opportunities to repeat what we were just taught, so it became very useful" and "the stuff that I picked up helped me sell, right away because it made me understand the relevance to customers". Interestingly, one agent acknowledged that the type of learning involved at this stage of the data initiative did not allow him sufficient time to assimilate learned content with his previous knowledge and experiences, and that it "was a memory thing" where he felt "more like a robot" being asked to simply repeat learned content to the customer. With the encouragement of incentives, this same agent admitted he "sold data for a while without knowing how it worked". Therefore, instances of near transfer, where representatives were taught facts and then asked to immediately reproduce what they learned on the call center floor were successful if an agent had the opportunity to do so before considerable time lapsed. However, this type of training was not necessarily successful when agents required a deeper understanding of products and services that extended beyond superficial features. The literature review highlights transfer studies that adopt a narrow criterion of successful transfer, and describes that this approach fails to consider that the learner may internalize the information broadcasted by the instructor and repurpose it in another context. Some participants affirmed that various customer

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scenarios require an understanding that extends beyond having basic facts presented to them. For example, agents stated "I have to see the actual situation happen for me to be able to do it… I have to have a scenario where it's live", "you have to be able to do some testing and sampling of what you're looking at and show results", and "it's one thing to say it and read about it on a computer, but when you actually play with the phone it changes your perspective". This type of interactive training that representatives describe comes in the form of in-class training where learners have the opportunity to experiment with the devices, brainstorm ideas and concepts, and sample real-life customer scenarios that relate to products and services with the trainer and colleagues. To achieve a degree of far transfer and high road transfer, agents need to learn beyond basic policies and procedures which are normally presented in the form of online documentation where they are asked to read information and answer a series of factual questions which serve to evaluate their understanding. Training in this manner involves little more than consulting documentation, which does not provide an in-depth understanding of issues, instead encouraging participants to state decontextualized information to their customer. While agents interviewed in this study confirmed that an abundance of time away from the phones was not a luxury they had, most affirmed that hands-on training was crucial in helping them transfer knowledge and skills to their everyday jobs, as it "gave them insight on what (they were) helping the customer on". A team leader that is responsible for employee development affirms the importance of added interactivity during data training, and highlights how online learning that involves "clicking, reading, clicking, reading" is not effective, as agents often had trouble learning concepts in this manner. As

a result, many would "just click until the end and try to do the test… and figure it out by themselves".

As previously discussed, many agents supported the fact that inquiring customers reinforced the relevance and need for data training. Equipped with the knowledge that information learned in training would be important prior to the educational intervention also highlights the likely existence of forward reaching high road transfer, where learners are able to abstract knowledge and skills from a learning situation in preparation for applications to potential contexts elsewhere. Agents confirm this existence by stating "I took the training a bit after the crisis and said, yeah I need to know that because a lot of customers are asking that", and "I can't (presently) explain, and my job is basically to be able to explain the billing to a customer so they understand why they get a charge. All of this is why we required more training". As with other elements in the transfer process, educators can leverage forward reaching high road transfer if they are aware that learners are attempting to use strategies that are consistent with it to solve anticipated problems.

Generation Y and Informal Learning

In the literature review, environmental factors that impact a learners' performance were highlighted. This was conducted in order to underline elements that would be difficult to reproduce in a laboratory setting. Some of these elements in this study that challenged learners include inadequate tools, uninformed managers, and general anxiety due to inexperience when supporting customers. While these challenges create some stress in the lives of representatives and their supervisors, they also bring about interesting information seeking activities as a result. An unanticipated event revealed in most participant interviews is the admission of representatives using informal learning

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tools. In this business training context, informal learning is described as discovery activities undertaken by representatives independently from instructor-led and e-learning programs with the goal of improving knowledge and skills that can be applied on the job. When agents were questioned on the merits of their tools, including their knowledge management tool and corporate website during the launch of important data products and services, many expressed dissatisfaction with these resources. When the interviewer further probed these individuals regarding the tools they use to obtain the required information to address customer concerns, an array of interesting and creative informal learning strategies came to light.

During the launch of a popular smartphone device at the research site, information regarding the phone was initially sparse due to confidentiality agreements with the manufacturer; preventing agents from being adequately trained in advance of the device launch. Even basic concepts escaped many of the representatives in the call center, who did not have suitable tools to answer basic questions. At the outset, they "didn't know the difference between a kilobyte, megabyte, and gigabyte... even in their (knowledge management tool), it was not at all clear". In the days following the launch of this popular device customers were calling in droves to inquire about modifying certain features of their services and personalize their phone. Unfortunately, most agents had not yet been sufficiently trained, and their tools contained no more than the entire user manual for this device, which amounted to hundreds of pages of technical documentation. On this subject, one representative explained that "it is hard when it is a really complex handset, and when (our tool) brings us to the Apple page and a PDF file... you had to search and that's not as quick as you would like" when a customer was on the phone. Faced with this

reality, agents employed many creative strategies to obtain the necessary information that would resolve their calls with customers. For example, most participants stated that on at least one occasion they obtained the necessary information regarding a smartphones' menu structure by seeking a colleague who had this device, borrowing it, and testing it while on the phone with the customer. Colleagues that owned these new devices "became a source of answers to (them)" as they knew that at least one of them would have the device and "know the answer". This is substantiated by comments such as "our support, for us, really came from colleagues who had the phones," "I often ask around me, especially when a colleague owns that phone" and "one of my colleagues had an unlocked phone, so whenever I was getting a call (regarding this device), I would get up and go see him". When colleagues did not have the device that agents required to support customers, they went so far as to run to the call center entrance and use a demonstration model provided by the manufacturer that was in a showcase cabinet. This unit was not placed in this location as a job aid or reference tool for representatives, but was used as such by those who were resourceful and wanted to help their customer on the phone. As one agent states, "instead of transferring my call, I used to put my customer on hold and run to the new phone that was out there. I would test it out and see what exactly was on the screen. They were asking me the path on the phone, so I would go see for myself". A different agent also used this device as a job reference tool and was disappointed when the device was no longer available. He states, "the fact that we had one downstairs, before it got stolen was really useful". In hindsight, had a limited number of devices been provided to each department during the launch of this smartphone, performance in this area would likely have improved, as agents would have spent less

time online with customers and been able to resolve a greater number of issues during the first call. As well, the availability of these devices would have likely reduced the chances of agents having to transfer their call to a technical department or forcing an unsatisfied customer call back to rectify an unresolved issue. Interestingly, since results from participants in this study were collected and validated, agents working in the technical department were equipped with device emulators that are provided by manufacturers, which they can be executed on their desktop computers. During a device-specific call with a customer, representatives can refer to these emulators without having to rely on the physical device in hand. While these applications are not available to every agent, incorporating this type of job aid does have the potential to improve informal learning activities and individual performance.

Informal learning is also exhibited by representatives that access information to support customers from external websites outside of the organization's local Intranet. Since service and support is conducted on wireless technology, agents are aware that similar devices and services are also offered by other wireless providers, and that with some research using Internet search engines, they can locate resources that provide insights on issues they cannot resolve using internal assets alone. This is supported by comments such as "you could Google it and have a whole bunch of forums, because somewhere in the world, someone had the same issue," "when I encountered something difficult with the iPhone I would go to the Apple website" and "crackberry.com (website) really helped. These are people that actually have the phones, have had the issues, and they fixed it or had someone fix it for them". This instinct to search for relevant information using third party resources represents an interesting dilemma for educators

and business trainers, as it is encouraging to see resourceful students motivated to learn using any means at their disposal, yet also worrisome as there is no way to validate the quality of information being accessed and transmitted to the customer. As stated in the literature review, Millennials will seek information on websites or other external resources to supplement their knowledge base or provide a different perspective on a topic. As educators, it is important to be aware of this trend and attempt to leverage it in our training solution, rather than deny its existence and forbid students to use it.

When probed on the subject of informal learning, support staff reiterated the strategies used by representatives during their information seeking activities. During the launch of phones that used an operating system that was previously unseen by agents, a team leader states, "customer service representatives were passing them back and forth on the floor". He also reiterates that agents use any demonstration model phone they can find in order to assist customers, even if they are not intended to be job aids, and states, "they used what they needed to use". This team leader also confirms that he witnessed many agents using third party websites when they were in the process of looking for information that they could not locate internally. He states, "They would go on Google and search for whatever info they didn't know, like text messaging questions, iPhone questions". Interestingly, in an effort to thwart the use of social networking sites on the call center floor, the network support group locked all workstations from accessing websites outside of the local intranet. For agents that use the Internet for legitimate work purposes, this restriction was a source of frustration, as it limited their ability to be resourceful and increased the likelihood that their problematic calls would be transferred or remain unresolved. A team leader states that despite this restriction to the Internet, "a

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lot of customer service representatives have access through a DOS code that they could

put in which could unlock it. And that code went around (the call center) pretty quickly".

As a result, agents could access the Internet for work-related information outside of the

system mainframe.

With such a strong emphasis on informal learning from the perspective of this

group of learners during the transfer process, it is unknown why this factor is omitted

from transfer diagrams discussed in the literature review. Perhaps participants in this age

group view this type of learning as commonplace, whereas older learners might not

instinctively resort to seeking information outside of official communication channels.

Another possible reason is the fact that this study is conducted in a call center

environment that supports new technology in wireless communication, and agents can

obtain information on these subjects with easy by accessing the Internet, compared to

other call center environments, where this material might not be accessible. Regardless, it

is this researcher's recommendation that this topic be added to the transfer process

diagram when it is employed in a similar setting with learners in the same age group. In

the call center studied in this project, it would be in the best interest of the organization if

management was to encourage the information seeking activities amongst agents and

reward their resourceful performance by white-listing certain third party websites that are

frequently consulted to resolve technical issues with handsets. As well, rather than only

being able to access new devices during a scheduled training session, management in

operations could request to have devices or device emulators available to all agents

during their team meetings and also when they are on the call center floor in order to

encourage them to essentially play with these and explore their functionality.

The Reliability and Practicality of Peer Support in a Work Environment

Another unanticipated and interesting element to emerge from interviews with participants in this study was the existence and importance of peer support after training throughout the entire data initiative. Transfer models and literature that were reviewed placed the onus of support on managers and coaches, and explained how their role in the entire process was critical. Peer support was mentioned in the periphery of some studies, but the degree to which it surfaced in this study was not reflected in the literature. After two interviews with customer service representatives, this researcher was surprised that interviewees placed such importance on the role that colleagues had in supporting one another after training was complete, and how a lateral exchange of knowledge between colleagues was commonplace, rather than top-down support from management. Not only did participants state that they "learned more from people (they) work with", but also explained that they "had lots of people asking questions" and that in the interest of helping one another, actually "liked answering questions" and never considered it a burden. For example, one agent explains that his colleague had a smartphone "from the U.S. and he took the time and showed (him) how it worked", while this same agent would provide strategies for data sales to others, stating "I remember at the time I used to talk about it with everyone on my team; I would say look, it's really easy". With many interviews remaining, interview questions were adapted to focus on this interesting phenomenon in an attempt to understand how and why it manifested during the data initiative and whether or not others shared similar experiences.

The results conclude that in pressure situations, when team leaders and coaches are inundated with questions on data, and consequently occupied answering these

inquiries, agents had to use intuition and be resourceful when attempting to find solutions related to their questions during interactions with customers. In some situations transferring a data related call to the technical department would result in a thirty minute wait time for customers, and the queue to speak to a subject matter expert would often occupy an entire aisle in the call center. In these situations, "customer service representatives supported themselves on the floor". Statements from agents that support this situation include "I knew people, so that helped me... I got the real information I wanted", "we would go see them and they would show us things right away... our support was consulting the people who had the phone" and "I'll get a friend of mine, a colleague who has the phone to show me, and I'll take notes and then go tell the customer". A team leader explains this phenomenon from his vantage point, and describes how "people would be standing in line (at his desk) with questions on one thing and they would ask each other, and then suddenly you would see somebody disappear out of the line". When he inquired about what issues the agent had, other agents replied "oh I answered it, it was something about data".

One might assume that employees would require directives or incentives to offer peer support, however the results in this study reveal a trend where agents offered this assistance to one another for the sake of team building and knowledge sharing. For example, one agent described how she and her colleagues would "make scenarios for (themselves)" based on data and customer requests. They would e-mail these to each other and solicit and share feedback in order to develop best practices. Without any expectation to be acknowledged or rewarded, these agents conducted "ongoing training that (they) developed (themselves).

The Manager Role in Supporting Peer Exchanges

Interestingly, when team leaders realized the wealth of knowledge that some agents possessed, they made a sensible decision to leverage this by encouraging peer support activities. Rather than assume the role of a subject matter expert in supporting and training employees, team leaders and coaches focus on management and operational responsibilities, encourage a lateral exchange of support information between representatives, and provide a flexible framework for this to occur. The perception from management is that agents often relate better when information about data is transmitted and received at the working level between colleagues, as the quality of information is more relevant to job performance versus information that comes from managers which is often perceived as organizational rhetoric. A call center team leader explains, "it helps them relate a lot better cause they don't feel it's garbage information or top-down coming to them" and when confidence is an issue with some individuals, then learning from a colleague helps them feel that "if he understands it, then maybe it's not as hard as I think it is". Based on these findings, we can conclude that this study confirms the notions put forth by Nijman et al. (2003) who explain that supervisors provide the greatest value to their learners' abilities to perform when their efforts improve the transfer climate within the organization, and not when they try to offer direct support to employees.

Throughout the data initiative team leaders and coaches often "didn't even understand data and how it worked", as they had "no contact with customers and no contact with data issues" during this busy period. Therefore they are in a difficult situation when expected to provide support on this subject to employees that they supervise. With knowledgeable agents in their departments, management encourage a

series of activities that allow them to share information and learn, including individual peer to peer training, presentations from agents in team meetings, and knowledge sharing sessions during team huddles. A customer service representative explains this peer to peer knowledge sharing from both the perspective of the information provider and information receiver. He states "the guy that really understood data went around and spent a half an hour with everyone on my team. He answered my questions, and I knew I had the right guy to ask". This same representative shared his experiences at a later time in the data initiative when new employees arrived in his team, and his manager asked, "Hey, can you take 15 minutes and explain it to them?" Small clinics are also organized by management in an attempt to target groups of agents that are experiencing difficulties with concepts relating to data. Rather than try to learn everything about data themselves and forgo their other responsibilities, managers "would go randomly around the floor and get seven or eight people who didn't know about data, take them in a room with one of the kids that knows just as much as a (technical) agent and ask questions and get all of them answered".

Many calls concerning data are entirely new for agents, and therefore represent a learning opportunity to every employee if it can be shared. With people trying to stay abreast of these unique calls scenarios, they "were encouraged to work as a team so (they) could learn from each other and collect information together". When formal team meetings are conducted, customer service representatives are expected "to give presentations" on subjects pertaining to data or new wireless devices for which they possess insight and an understanding. They are also asked to offer "tips and tricks" that they acquired during the calls involving data scenarios that they had fielded. These team

meetings are an excellent source of information and guidance to agents who "were always able to help each other out and figure things out... when (they) had a difficult call and didn't know how to position it. (They) would get (their) heads together and figure something out". With a degree of ambiguity surrounding many call scenarios, these team meetings offer an opportunity for agents to also provide their opinions, as not all call scenarios are "black and white", falling instead in what some refer to as a "grey zone". "If there were grey zones that were common (among agents), they were addressed in (their) team meetings" where each person was able to "offer their opinions on it". They "talked about it, discussed it, and eventually (would) clear it up".

What remains uncertain when discussing the importance of peer support is if the context and participants in this study play a major role in the results, or if it is a crucial element in the transfer system that should always be considered and leveraged by training and management personnel despite employee demographics. If the same questions used to probe these learners are employed in a study involving a group of factory workers on an assembly line, very dissimilar results could be witnessed, as their work environment and lack of interaction with customers make them unique. The fact that this study is conducted in a call center environment, where agents sit in close proximity to each other, converse on a regular basis, and are encouraged to share ideas and solutions with colleagues could have contributed to the themes relating to peer support that are uncovered.

The Manager Role in the Transfer Process

As discussed throughout the various topics in this results portion of the study, management play an important role in the transfer of learning for participants attempting

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to study and apply the subject of data. This importance is not achieved by assuming the role of a subject matter expert or base of knowledge for agents, but instead by providing an environment and infrastructure that is conducive to knowledge sharing and resourcefulness. Many agents acknowledge that they do not "even go to (their) coach anymore" for answers to data related questions, since their knowledge on the subject is often the same. Most managers acknowledge the fact that they are not experts in the field, though were willing to work with representatives to "sit down and work it out together". One agent that works with the technical group explained how their managers afforded them a great deal of trust in researching topics related to data, as they "had exception sheets where they could sign off (from the phones) for an hour" in order to conduct tests on different phones. A different agent explained how his team coach created group meetings that encouraged discussions and peer to peer knowledge sharing on the subject of data, and asked agents to conduct tests on their phones in real time during these gatherings to ensure people understood the notions being discussed.

The Impact of Motivation in the Transfer Process

As outlined in the literature review, knowledge and individual interest are strongly correlated. During the data initiative at the research site, there were a series of steps taken to increase the likelihood that representatives would be motivated to learn about and sell data. Some of the initiatives undertaken were intended to intrinsically motivate agents, while others were put in place to extrinsically motivate them. There are debates on the merits and drawbacks of extrinsically motivating students to learn and subsequently perform tasks, and participants in this research exposed many of these debateable attributes. In order to properly distinguish between agents' motivation to

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perform their sales responsibilities and their motivation to learn in order to support

customers, they are presented separately, as significant differences are reported for each.

However, before delving into rewards and recognition, we will outline the emotional state

of participants at the outset of the data initiative and explore how this was impacted by

organizational initiatives.

Preparation and Expectations

Earlier, we discussed how findings highlight a significant negative correlation

between anxiety and transfer and how pre-training interventions can lessen student angst.

When participants were asked about their impressions regarding the data initiative which

began over one year ago, many had difficulty remembering their state of mind at that

time, though some expressed that they felt a degree of uneasiness and uncertainty. These

feelings are supported by participant comments which include "I expected to have less

confidence in projecting it to the customer," "everyone heard of the iPhone in the news

but not everyone knew the impact it would have" and "we have people that are almost 60

(years old) who don't even know how to use a computer". The organization took steps to

socialize data and introduce new devices and services with the help of promotional

activities in the call center, amusing and informative communication pieces delivered on

plasma screens and in corporate e-mails, engaging pre-training videos, and the

introduction of data-related incentives. Participant reactions to these interventions were

mixed, as some agents barely took notice of them, and considered data training to be as

commonplace as training on other subjects as mundane as a system enhancement in the

customer management software. Other agents took a keen interest in the data initiative

launched by the organization, though some implied this interest in acclimatizing

themselves with the subject was due to personal awareness and was conducted independently of the efforts taken by the organization. For example, representative that stay abreast of wireless technology on their own time made statements such as "I knew this is where the business needed to head and that this would be the next step. If you look at other providers in the U.S. and overseas, a lot of them had data already and it was a great success," "in telecom, I knew people were moving more towards writing text messages and emails, and not so much voice", and "I saw how data took off in U.S. and how everyone was connected". For these agents, there was no sign of anxiety in relation to their expectations and perceived relevance of the data initiative that would negatively influence their motivation; however not all agents shared this attitude.

In discussions with representatives that were less technical and often older, there appeared to be an added hurdle for the company to indoctrinate these people, as they were often set in their ways and still viewed wireless phones as devices used uniquely for voice communication. A team leader in the call center explains that agents who used older technology in their personal lives were less enthusiastic to jump on the data bandwagon. He stated "some agents have an old 1980's phone and just don't want to know about it (data), but it is part of their job". Agents that shared this characteristic were quick to point to events undertaken by the organization to familiarize them with data hardware and services. For example, a representative, that even today refuses to use a smartphone and data in her personal life, stated that "I had gone to an open forum, and I remember them saying that more and more now data was going to be important. Forums caught my eye; they discuss what's going on". A second agent also explained that an open forum by management prior to the launch of the data initiative was helpful; he

explains "every time there was an open forum about something, they did mention the stuff that would be coming, and that data would be more and more in demand". Gradually, even agents who had no personal interest in data products and services understood why their customers were enthusiastic about the subject. For example, when discussing social media tools on smartphones, one representative states "I never really got into it", yet he understood why younger people who use social media tools such as Facebook would want " to check their Facebook updates on it on a regular basis" from their phones.

While rewards will be discussed in greater detail for their role in motivating agents after their training was complete, these company-wide incentives also impacted student preparation and expectations. Customer service representatives that had not yet attended any data training nonetheless received corporate communications on the subject. Through these communications, they became aware of the bonuses others were receiving for learning about the subject and applying this knowledge through data sales with customers. A team leader in the call center explained, "Once they started publishing the payouts after a few months and people started seeing the same reoccurring names of certain customer service representatives..., they asked themselves why (they were) not also getting paid". The desire to sell data and earn bonuses became important to many employees, though "they had to be able to explain data to the customer", and therefore had to participate in formal and informal training to reap these rewards. While most transfer of learning models consider rewards to be a motivating factor in the post-training phase, this study uncovered the fact that these motivators also encouraged agents prior to training.

Customer service representatives that took part in this study all mentioned that motivating factors were put in place by the organization in order to encourage training participation and job performance relating to data. The following two sections have distinct titles, as results point to a clear difference between agents being motivated to sell and gain financial rewards for the sales aspect of this data initiative and being motivated to learn about products and services in order to better serve their customers.

Motivation to Perform in a Sales Culture

During the data initiative a monetary bonus was provided to agents who sold data services to customers. While this increased data sales, it also raised the question concerning whether or not agents actually learn about the products and services, and when these are suited for a particular customer need, versus simply learning how to push them to customers for financial gain. Reactions concerning rewards were mixed, as some agents felt the incentives encouraged them to learn, while others felt it only encouraged them to sell. This difference is illustrated by agents that provide varying responses on the subject. For example, when discussing the merits of rewards, some agents describe them as excellent team building ideas that encourage knowledge sharing and the desire to learn more. This is supported by statements such as "you wanted to learn it and be able to apply it," "the group data contests...strengthened the bond in our team in terms of energy," and "in terms of actively participating, that's more when the incentives came in". When asked the same questions, some representatives had a very different outlook on the subject, making statements such as "I didn't feel that I was offering something that was necessarily better for the customer. I was offering something that was better for me,"

"the downfall of the incentives is that humans are not always honest," and "it definitely motivated people, but I'm not sure if it motivated them to understand".

Interestingly, some customer service representatives explained that the entire bonus structure was "a source of frustration", feeling that it was planned unfairly and beneficial only for those who were aggressive in their sales approach with customers. Since cash bonuses were awarded solely for data sales and not the provision of excellent customer service, these representatives stated that their role of providing quality service to customers took precedence, and that cash rewards were merely incidental if they were attained. In fact some agents tried to disassociate themselves from this type of incentive, feeling it actually countered the company-wide philosophy which is to always place the customer first and provide products and services based on his or her needs. This reaction is echoed by assertions which include "I don't base myself on the reward; I base myself on the customer solution", "if (customers) ask me the question, I'll offer the services, but I'm not going to be pushing a service", and "I don't really care to see who got five hundred dollars in bonuses. I mean good for him if he can sell that much".

As expected once the extrinsic motivation was removed in the form of cash bonuses for data plan sales, agents no longer felt compelled to sell data, and even purposefully ignored it as some resentment occurred towards management, who agents now believed were ignoring the work they put into selling these products and services. When discussing the organization's removal of the ten dollar bonuses for data sales, agents made statement such as "don't come ask me for data cause there's no point", "it (data sales) really went down when they removed the ten dollar incentive", and "since they removed it (the incentive), it's been less of a priority". A team leader confirmed this

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reality, stating "data sales went down as customer service representatives had no push; no reason anymore to go ahead and do it". Interestingly, this same team leader mentioned that smaller bonuses were later brought back for larger data sales, and that this somewhat motivated the high performers who were very good in sales, but had little impact on the average customer service representative. When discussing the mandate put forth by management to provide bonuses to agents, a communications specialist, responsible for informing agents of data related issues, claimed that executives "weren't trying to lure them with the incentives, but just wanted to create some excitement about selling those types of services". He also acknowledged that management is weary of providing bonuses every time they want to encourage an initiative, and explains "if they do it too much then they (the representatives) won't give it much thought if there is no money".

Motivation to Learn and Support Customers

While extrinsic rewards resulted in short term performance improvements, management also rely on other non-monetary strategies to encourage and incite employees to learn and support customers. Strategies used to encourage intrinsic motivation include team building activities, professional development opportunities, and the adoption of a learning culture.

The call center is divided into different functional units, and within each of these there are smaller groups of individuals with specialized roles. In order to motivate employees to share knowledge while engaging in friendly competition, management organized various team building activities which encouraged them to take part in the data initiative without offering them cash rewards. For example, one team leader encouraged small internal competitions within his team, where "one month it would be guys against

girls, (and the next) it would be "newbies" against the old ones" In these types of group

contests, "instead of getting pressure to sell from their coach, (agents) would get if from

their peers... therefore did not feel it was the boss that was pushing (them)". As the month

progressed, agents would read posters in the call center which listed the team standings,

and would often "try to help colleagues" by increasing their data sales, conducting side

by side peer coaching activities, and ensuring everyone within the team had attended the

data training. As early as their initial training, agents are part of a team and have a sense

of belonging, which is further reinforced once they assume their professional position and

begin taking calls. Acknowledging the fact that they "are team driven" and leveraging

their sense of belonging to encourage them to participate in training, assist their peers,

and attain sales quotas appears to be a successful technique that the organization was able

to utilize in order to intrinsically motivate its employees.

The professional development opportunities arose for customer service

representatives as team leaders and coaches were expected to focus on the managerial

aspects of their job, and as a result many of them were "not the most knowledgeable in

terms of (data) services and procedures". Therefore, management often asked

representatives to assume temporary roles as learning consultants or subject matter

experts to help train and support their peers. This peer to peer training became a very

popular approach throughout the data initiative, as temporary assignments for tasks such

as product research, job aid design, classroom presentations, and the development of data

clinics were allocated to qualified agents that were interested in these initiatives. These

small projects give representatives an opportunity to take some time away from

answering calls and develop skills that are valuable for their resume, professional development, and opportunity for advancement within the organization.

As employees in corporate training, we acknowledge that customer service representatives are unable to learn every facet of their job in our classroom and successfully transfer it to their job. Therefore, training personnel encourage a learning culture where managers on the call center floor must collaborate in the ongoing training and coaching of employees. While some initiatives are specifically designed and implemented by instructional designers, call center team leaders and coaches are also encouraged to create their own learning and development activities within each of their groups. During the data initiative, these managers "developed an environment where (representatives) were constantly in training", whether it was scheduled classroom sessions or informal learning activities. For example, in team meetings, a team leader describes how he asked representatives to take out their phones and each explain how data was charged on their device, and then pass their phone along to peers and demonstrate data services. In other team meetings, a group of customer service representatives "made clinics where they would come in and sit down... and explain what data was". The consistent learning and development activities helped representatives feel valued, as they were asked to share knowledge, tips, insights, and opinions on subjects relating to data. Information was not only delivered in a top-down manner, as agents were responsible for learning and applying knowledge and skills, and also disseminating it to others in the organization.

In conclusion, participant data supports the notion that extrinsic rewards and increased sales are correlated, however opinions vary regarding whether or not these

rewards actually benefit the customer in terms of agents providing the best possible

support and being an advocate for the customer. Results indicate that providing cash

incentives will result in increased sales, which is a performance metric for customer

service agents. However, this increased performance was not sustained in comparison to

other initiatives with encouraged employees to develop their skills, build relationships

within their teams, and participate in knowledge sharing activities.

Implications for Practitioners in the Educational Field

Recommendations to Consider

Looking back at the transfer model proposed by Wick et al. (2009) it is clear that

certain elements in the value chain for turning learning into results should be fine-tuned if

it is to be employed in a customer service environment. First, some elements should be

interrelated and not listed as factors that only impact the learner at one unique point in the

transfer system. For example, this study concludes that rewards are a significant

contributor to participant's performance after the training intervention, and also their

motivation and perceived relevance of training programs before they begin. Multiple

factors in the transfer process directly and indirectly impact learners at various stages,

and a customer service transfer model that considers these interrelationships needs to be

contemplated.

A Customer Service Transfer Model

Based on existing studies regarding the transfer of learning and transfer models, a

modified transfer process is proposed that addresses factors uncovered in this study that

have a profound impact on learners and the staff put in place to support them. Based on

the realities of a call center, equal importance should be afforded to pre and post training

interventions, rather than considering these factors as peripheral, and dependant on the

training intervention. As well, factors which might be considered relevant to only one

phase of the transfer system in certain transfer models have been revisited and assigned

an importance to any step where there is a consensus among study participants.
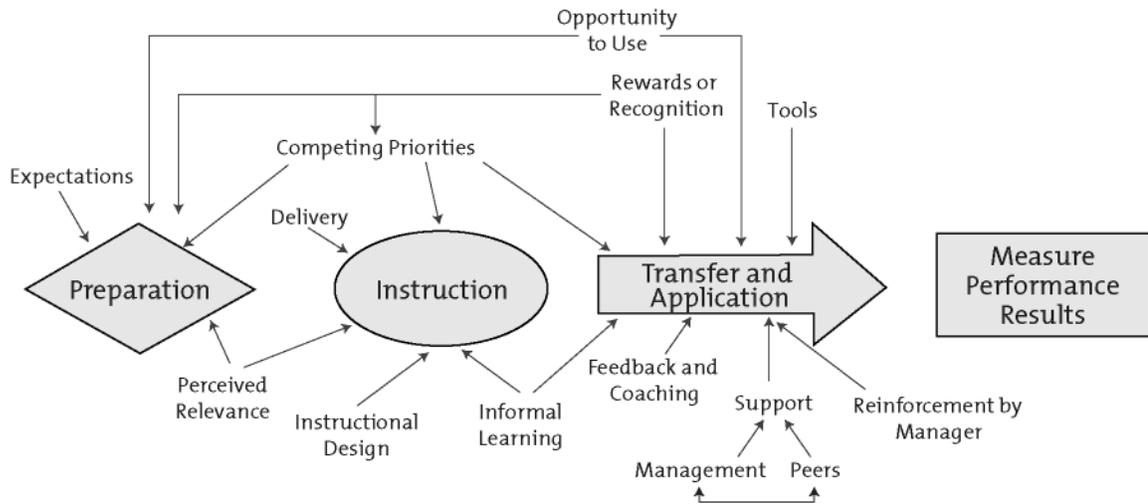
Figure 4. A Transfer of Learning Model for Customer Service Employees.

Elements that are added in this revised transfer model include a clearer distinction

between management support and peer support, as characteristics of these differ

markedly in the process that took place in this study. While these elements are distinct,

and each influence employee performance in different ways, there should nonetheless be

a link drawn between them. Management play a significant role in encouraging peer

support activities and creating a transfer climate that is conducive to knowledge sharing,

just as peers impact a manager's ability to support learners in other ways by undertaking

training and development tasks of their own. In a different environment outside of this

study, peers may have the intention or will to support each other, yet be discouraged to do

so by management. In this case management would still have substantial influence on

peer support activities; however their efforts would be invested in obstructing these behaviours. In a different setting, management might want peers to assist in training and development, but encounter employees that are either unwilling or unable to do so. Regardless of subtleties of these situations, managers and employees at the working level are linked in support activities during the transfer process.

As previously discussed, informal learning activities are present among many of the participants interviewed in this study, and therefore should be added to the transfer process during the training and application phase. With the knowledge that informal learning is an occurrence in the workplace, trainers or managers can provide the tools for learners to explore and solve problems outside of the classroom and in other formal training environments. For example, in this call center setting, management could allocate a certain number of phones that agents could borrow, and unlock Internet restrictions on some workstations in supervised areas. When agents take ownership of their learning and development, and are resourceful in finding the knowledge and building the skills to help them better perform, the organization should provide the infrastructure and scaffolding to encourage and support them.

Wick, et al., (2009) propose that the opportunity to use a skill influences the learner in the transfer and application phase of the process. While this research affirms this reality, it also highlights the fact that the opportunity to use a skill influences a learner's perceived relevance of a training initiative before the instruction begins. Participants explained that they had received calls on the subject of data prior to partaking in any actual training, and that their inability to properly treat these calls combined with the knowledge that they would subsequently receive an even greater

number of them, made them aware that the subject matter in upcoming data training was relevant to them. As a result of this finding, the topic is linked to both the pre and post training areas of the transfer process.

Many transfer models view rewards and recognition as factors that influence the learner in the application phase of the transfer model. However, in this study, participants explained that the knowledge of monetary rewards prior to partaking in any training helped them also understand the scope of the data initiative and the importance that the organization attributed to it. This knowledge also helped them set personal learning objectives and uncover sales strategies from top performers that would enable them to become better sales performers. Therefore the topic of rewards or recognition is relevant in both the pre-training period and the post-training phase of the transfer process.

The Transfer Process in Guiding Business Decisions

The fact that very few businesses evaluate the efficiency of their training by assessing employee ability to transfer learned content in a performance environment is highlighted earlier. The reasons organizations decline to conduct this important step in the human performance process include lack of time and resources, the belief that assessing participants at the conclusion of the instruction phase is sufficient, and the lack of knowledge regarding how to implement an evaluation that considers and weighs many organizational variables. The transfer system suggested in this study points to the existence of transfer enhancing and inhibiting variables that can be evaluated and the circumstances that require consideration during these assessments. If employee evaluations yield results that indicate learners' inability to transfer, the use of the proposed transfer model will help consider performance enhancing and prohibiting

variables that impact employees, rather than focus solely on the educational intervention itself. As highlighted throughout this study, the importance of variables outside the educational intervention are often just as relevant to learners in their attempt to transfer, and at times even take precedence.

Study Limitations

As with many qualitative studies, the results obtained in this research are not necessarily generalizable outside of the research site. While interesting characteristics of the transfer process surfaced through investigation of the data transformation project in this work environment, this researcher would not recommend that educators within the organization or outside of it exclusively utilize these results without conducting a proper needs assessment to plan, design, and develop future projects. Audience demographics, job environment, as well as the nature of the job that employees perform are factors that influence the transfer process; and are often very dissimilar across different workplaces, and even within workplaces.

This research site highlights a company-wide training intervention, which upon close examination had very unique characteristics that are not necessarily present in many workplace cultures. For example, training participants were aware of the relevance and magnitude of the data initiative prior to attending any training sessions. Agents had already received calls on the subject of data and were aware of performance bonuses bestowed on those who could sell data-related products before they were trained, making it much easier for support staff to motivate employees and encourage them to take ownership of knowledge sharing activities. Prior to training, customer service representative were aware of common customer queries on the subject of data, knew they

would have the opportunity to immediately apply what they learned after training, and that they would be rewarded to do so. While these characteristics were not the sole reasons that contributed to the transfer model proposed in this study, their influence is significant, and their removal would likely impact results.

As discussed in the research methodology, the constructivist grounded theory approach has substantial merits in qualitative research. However, one could argue that the interview questions asked to participants provided the direction of each conversation, and in turn, generated results that are not truly spontaneous and precise reflections of participant experiences. This differs from an objectivist grounded theory, where the research would essentially begin with a blank slate, on which participants would describe events and set the direction for the research process, independently of any researcher influence or bias. Throughout this project there was an effort to balance emerging ideas with pre-defined themes, however there is nonetheless some bias present when a priori categorization occurs before data collection activities.

Future Research

Workplace factors identified as facilitating transfer at the setting explored in this study include supervisor and peer support, a continuous learning culture, and a climate that encourages the transfer of training. What remains unknown is the impact that the removal of a variable identified in the transfer process would ultimately have on human performance, and whether researchers could generalize the results outside of the immediate area of study. An experimental design that follows the learning paths of two

distinct groups of customer service representatives, each containing a different performance-related independent variable in the instruction or support they receive would help quantify some of these trends.

An additional facet worthy of further investigation is the age differences in learners that follow the transfer process. This study highlights the learning and information seeking techniques used by employees that are primarily made up of Millennials, and explains how customer service representatives of a more advanced age do not necessarily follow these trends. Therefore, a follow-up qualitative study focusing on a workforce with a different mean age using the same methodology could yield results that might help researchers generalize beyond their immediate environment. These generalizations could provide guidance for management in the implementation of strategies and best-practices used to instruct and support learners across different age groups; and also direction when addressing performance strategies that yield inferior results.

Most importantly, as explained by Holton, Chen, and Naquin (2003), cultural variations across organizations suggest that not all organizations will or should build the same types of transfer systems. While unanticipated findings were prevalent in the organization chosen in this study, such as informal learning and peer support, a more conservative work environment could potentially discourage this type of interactivity. Validating these findings across organizations with similar performance objectives and employee age demographics could yield a transfer framework that is relevant to a type of industry or organizations with similar job hierarchies and employee characteristics.

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Appendices

December 7, 2009

RE: Call for Participants –

Exploring the Transfer System. Validating a Process Model with a Business Training Intervention

Dear Colleague,

As a requirement for my Master's Degree in Educational Technology at Concordia University, and to fulfill my role as a member of Fido's training department, I am conducting a qualitative study exploring the transfer of learning and the impact our different professional roles within our organization have on this process.

The data transformation project that began over year ago has been a great success at Fido, and our sales statistics prove this. This initiative involved the participation of people from a variety of departments, all contributing their efforts to ensure the knowledge of data and skills around selling and supporting it were not only transmitted to learners in the call center and sales channels, but that this learning was properly applied and sustained on the job. If educators and management in our organization are to offer solutions that result in learners properly transferring what they learn to the work environment, then an understanding of the factors that help them achieve this requires exploration.

I would like to explore the variables that impact learners when a large-scale project such as this is launched. As a participant in this study, you will be asked to partake in face-to-face, telephone, or e-mail interviews, where discussions will allow you to reflect upon your role during the data transformation initiative. Topics regarding training, motivation, work environment, managerial support pre or post-training will be explored as they pertain to the data transformation project and your role.

Benefits of participating in this study include the opportunity to collaborate in the development of a case study that depicts the successful implimentation of a company-wide initiative that had an ultimate goal of improving sales and customer satisfaction in a relatively new domain in the field of telecommunications. This case study can provide direction for future company-wide endeavors similar to data transformation, where the buy-in of individuals on a company-wide level is required in order for it to be considerd a success. As a sign of my appreciation for your participation, please accept my offer of a modest lunch during or after our interview(s).

Participation and subsequent continuation in this study are entirely optional. Interested parties will be presented a consent form which outlines their rights and privacy as participants. For people interested in participating, the consent form will ensure that all

issues of confidentiality will be respected. Only I (David Welch) will have access to the collected data and results. Pseudonyms will be used in any published report, and participants will be offered a copy of this report prior to publication in case they wish to challenge any statement made throughout the document.

Thank you for considering my request.

Sincerely,

David Welch [david.welch@rci.rogers.com]

CONSENT FORM TO PARTICIPATE IN RESEARCH

CONSENT TO PARTICIPATE IN (*EXPLORING THE TRANSFER SYSTEM. VALIDATING A PROCESS MODEL WITH A BUSINESS TRAINING INTERVENTION*)

This is to state that I agree to participate in a program of research being conducted by (David Welch) of (Department of Training) of Fido Solutions Inc. and (Department of Educational Technology) of Concordia University (19 Picard, N.D.I.P., Quebec. J7V8Y6).

A.   PURPOSE

I have been informed that the purpose of the research is to identify the factors in the transfer of learning process affecting job performance in learners. It is an examination of the variables that impact a learner prior to any training, during the educational intervention, and subsequently when learners have the ability to perform what they have learned in a job environment. Basically, Mr. Welch is exploring whether there are measurable characteristics pertaining to learners' perceptions of factors that consistently influence their educational activities and ability to apply these. The exploratory study and subsequent data collected will consist entirely of learners' and support staffs' perspectives gathered through focus groups and interviews.

B.   PROCEDURES

Research will be conducted in meeting rooms or classrooms when in a face-to-face format, or be done over the phone or e-mail. Participants will be required to offer opinions and thoughts regarding their role in helping learners apply what they learn to the job environment, and will need to allocate approximately 1 hour over the course of the project to answer these questions. This hour will likely be divided into 3-20 minute sessions. The first of these sessions will require a 5-minute overview of the research objectives, procedures, and conditions of participation. Once data is obtained from participants, it will remain confidential, and individuals will only be identified as "participant 1", "participant 2", etc... in any published materials.

C.   RISKS AND BENEFITS

Data is strictly confidential and identities of participants will never be revealed. Interviews will be conducted outside of regular work hours to avoid any conflict with work schedules, and therefore there are no anticipated risks associated with participation. Participants will contribute to the structure of future initiatives by providing valuable insight into this case study on how the transfer of learning was achieved by implicating many different resources within the organization. As a token of appreciation for their

participation, participants will be provided with a modest lunch or snack during the interview process.

D.   CONDITIONS OF PARTICIPATION

- I understand that I am free to withdraw my consent and discontinue my participation at anytime without negative consequences.
- I understand that my participation in this study is CONFIDENTIAL (only the researcher will know my identity, and that this information will remain confidential.)
- I understand that the data from this study may be published.

I HAVE CAREFULLY STUDIED THE ABOVE AND UNDERSTAND THIS AGREEMENT. I FREELY CONSENT AND VOLUNTARILY AGREE TO PARTICIPATE IN THIS STUDY.

NAME (please print)   _____

SIGNATURE   _____

Exploring the Transfer System. Validating a Process Model with a Business Training Intervention

If at any time you have questions about your rights as a research participant, please contact Adela Reid, Research Ethics and Compliance Officer, Concordia University, at (514) 848-2424 x7481 or by email at areid@alcor.concordia.ca.

Appendix C: Interview Questions to Customer Service Representatives

1. What were you expecting when the whole data transformation project began?
    a. When you started receiving communications on the subject?
    b. When you started seeing the plasma screens, posters, and mascot in the call center?
    c. When you heard about new data services at the Inforum?
    d. When you overheard colleagues and management discuss the subject

2. How were you prepared for the training offered related to the data initiative? Was this different versus other training you regularly take part in?

3. What prior knowledge or skills relating to data did you have before participating in the data training offered by the organization?

4. What was your perceived relevance of the entire data initiative
    a. Once you started doing the training?
    b. When you heard about the subject in corporate communications
    c. When you started hearing about the subject from management and receiving coaching on the subject?

5. You undoubtedly had and still have other priorities on top of data training and data issues. With all these competing priorities, did you devote more attention to data issues? If yes, can you explain when and why?

6. Was training itself offered any differently during the data initiative compared to what you typically see?
    a. Online?
    b. In-class?
    c. Types of tools it offered to help you do your work?

7. Did you have the opportunity to use what you were being taught on the job? How did this affect your desire to take other training courses on data and actively participate in team huddles on the subject?

8. Once training was complete and you were asked to begin supporting customers in data related issues, were your tools able to support your performance on the job?

9. How were you supported or encouraged by team leaders, coaches, and colleagues after the training related to the data initiative was offered?

10. What role did rewards and recognition have on your job-related performance after you took part in data training? Examples include group vs. group data sales contests, performance bonuses for data sales, names of top performers published in The Wire.

11. When you encountered or encounter difficult calls relating to data, what resources or tools help you resolve the call?

1. What was your perceived relevance of the entire data initiative?
   - When you started receiving communications on the subject?
   - When you started seeing the plasma screens, posters, and data mascot in the call center?
   - When you heard about new data services at the Inforum?
   - When you overheard colleagues and management discuss the subject?

2. How did operations prepare agents for the data training? Was this different from other training programs they took part in?

3. CSRs undoubtedly had and still have other priorities on top of data training and data issues. With all these competing priorities, did you encourage them to devote more attention to data issues? If yes, can you explain when and why?

4. Based on what you have seen in the past that was offered by the training department, was the online and in-class training itself offered any differently during the data initiative compared to what you typically see?

5. How did you account for the fact that some learners failed to transfer everything they learned in training? Were other tools, resources, or formal and informal meetings made available to them after training?

6. As CSRs completed the data training, did they have the opportunity to use what they were being taught on the job? Do you believe this influenced their participation in team huddles on the subject of data?

7. Once training was complete and CSRs were asked to begin supporting customers in data related issues, were their tools able to support their performance on the job?

   - Did you observe them using informal learning tools such as non-corporate websites or personal devices owned by them or their friends?

8. When difficult calls starting coming in on the subject of data, how important was peer coaching and CSRs assisting each other in an informal manner on data related issues?

9. What role did rewards and recognition have on CSRs job-related performance after they took part in data training? Examples include group vs. group data sales contests, performance bonuses for data sales, names of top performers published in The Wire.

Appendix E: Interview Questions to Corporate Trainers

1. What was your perceived relevance of the entire data initiative?
   a. When you started receiving communications on the subject?
   b. When you started seeing the plasma screens, posters, and data mascot in the call center?
   c. When you heard about new data services at the Inforum?
   d. When you overheard colleagues and management discuss the subject?

2. Based on formal and informal discussions with trainees, what do you believe the average prior knowledge or skill level relating to data was before the data initiative began?

   ▪ With this in mind, did our training solution meet the needs of these learners?

3. With all the different training initiatives offered by our organization, many of which you took part in delivering, was there an added level of importance attributed to data training?

   ▪ Were others in the organization helpful in communicating this importance?

4. Based on what you have seen in the past that was offered by the training department, was the online and in-class training itself offered any differently during the data initiative compared to what you typically see?

5. Did you observe students using informal learning tools on the subject of data, such as non-corporate websites (Howardforums, Mobilesyrup, Crackberry) or experimenting with personal devices owned by them or their friends? Or were there resources other than these that you observed them using?

6. Did you account for the fact that some learners would fail to transfer certain things they learned in training? To your knowledge, were other tools, resources, or formal and informal meetings made available to them after training in "Acceuil" or in their teams on the floor?

7. There was an expectation that learners would have the opportunity to immediately use learned information and skills regarding data on the job. With this in mind, what was your approach in delivering your training on this subject?

8. In your opinion, what effect did the organization-wide approach to communicating the importance of data have on the learners (CSRs, Sales reps) in terms of selling and supporting data?

Appendix F: Interview Questions to Instructional Designers

1. What was your perceived relevance of the entire data initiative?
   a. When you started receiving communications on the subject?
   b. When you started seeing the plasma screens, posters, and data mascot in the call center?
   c. When you heard about new data services at the Inforum?
   d. When you overheard colleagues and management discuss the subject

2. To your knowledge, were participants prepared any differently for the training offered relating to the data initiative versus other training they regularly took part in?

3. I know this is a very general question, but could you tell me about how you designed instruction during the data initiative, including conceptual strategies, medium of delivery, and any other factors you feel made it stand out versus previous offerings?
   a. Online?
   b. In-class?
   c. Types of tools it offered to help learners on the job?

4. With all the different training initiatives offered by our organization, how did you ensure learners took notice in the data modules, and recognize their importance? Did the launch of certain products or services help convey this importance?

5. There an expectation that learners would have the opportunity to immediately use learned information and skills regarding data on the job. With this in mind, what was your approach in designing your training products on this subject?

6. When training feedback from operations and sales started making its way back to you, did this impact the way you designed subsequent training products?

7. In your opinion, what effect did the organization-wide approach to communicating the importance of data have on the learners (CSRs, Sales reps) in terms of selling and supporting data?

Appendix G: Interview Questions to Communications Coordinators

1. What was your role in preparing learners for the important events during the data initiatives, such as training, new devices, and incentives?

2. What type of message did you try to communicate when the data initiative began, and as it continues today?

3. What was you and your department's perceived relevance of the entire data initiative when:
    a. You were asked to include it in your corporate communications?
    b. You saw some of the modules offered by training?
    c. When you heard about new data services at the Inforum?
    d. When you overheard colleagues and management discuss the subject?

4. Regarding rewards and recognition for CSRs, what has been the feedback on the contests (group vs. group data sales), promotions, and performance incentives you have been promoting in e-mails relating to data?

5. Did people on the call center floor or management provide any feedback to your department about your role in raising awareness and helping learners sell and support data?

6. In your opinion, what effect did the organization-wide approach to communicating the importance of data have on the learners (CSRs, Sales reps) in terms of selling and supporting data?