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Boston College

The Carroll Graduate School of Management

Department of Organization Studies

MODEL II BEHAVIOR AND TEAM PERFORMANCE:  
AN EXPERIMENTAL DESIGN AND INTERTEXTUAL ANALYSIS

a dissertation

by

RAY ANTHONY LUECHTEFELD

submitted in partial fulfillment of the requirements

for the degree of

Doctor of Philosophy in Management

December, 2002

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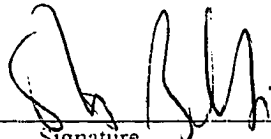
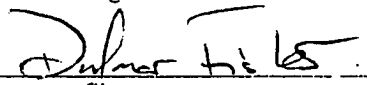
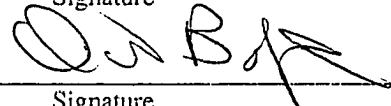
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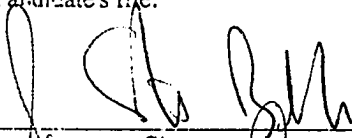
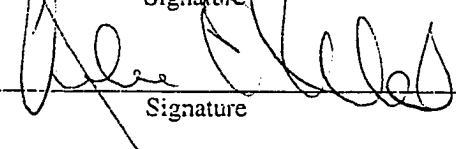
Dissertation Committee: (Please indicate pass or fail)

Dr. Stephen P. Borgatti	PASS	
Name	Vote	Signature
Dr. Dalmar Fisher	Pass	
Name	Vote	Signature
Dr. David Boje	Pass	
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Ph.D. Program Director,  
Organization Studies Dept.

Dean,  
Carroll School of Management

	Signature	Dr. Stephen P. Borgatti
	Signature	Dean Helen Frame Peters

## **ABSTRACT**

### **MODEL II BEHAVIOR AND TEAM PERFORMANCE: AN EXPERIMENTAL DESIGN AND INTERTEXTUAL ANALYSIS**

A dissertation by

**RAY ANTHONY LUECHTEFELD**

Dissertation Committee Chair: Dr. Stephen Borgatti

Quantitative research into Argyris' Model II behavior is hampered by both the difficulty of administering Model II interventions to large populations of teams and the lack of rigorous, operational definitions of what constitutes Model II behavior. This research overcame these obstacles by considering operationally defined Model II interventions in the form of inquiries to help team members surface information. The interventions were administered in an experimental design involving three hundred sixty nine individuals in seventy-seven virtual teams. Each team participated in a business simulation that involved improving the financial performance of a fictional company.

This study posed two key questions. First, can team performance be enhanced by these Model II interventions? The results indicate that treatment with these interventions significantly improved performance in the simulation. The second question considered whether surfacing information is the mechanism by which these interventions work. The

research found that some interventions do improve performance by interacting with team members' surfacing of information.

Based on the works of Bakhtin, Barthes, and Kristeva, an intertextual analysis of team dialogues provided an additional, qualitative illustration of the processes leading to higher performance. The analysis looked at three essential aspects of the dialogues. First, how and when threads of discourse were selected for inclusion or left out of the narrative by team members. The point at which team members chose to insert particular texts into the dialogue was significantly related to team performance. Second, the analysis considered how multiple, conflicting voices (polyphony) were either silent (resulting in an imposed monologic discourse), surfaced and left unresolved (resulting in a cacophonous polyphony), or surfaced and resolved (resulting in a shared monologic understanding). Finally, the analysis identified forces that either pulled the team together toward a unified decision or pushed them apart to an unresolved polyphony.



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## **DEDICATION**

To my children, Hannah, Emma, and Tessa, for whom I hope this will help build a better world.

To my wife, Denise, who supports me and stands by me.

To my Mom, who did so much for me.

To the memory of my Dad, who had so many dreams left unfulfilled.

## ACKNOWLEDGEMENTS

The completion of a dissertation has been likened to scaling one's own private Everest. My path through many storms and clouds, finally to emerge, blinking, into the bright sunshine, has been made possible by the support of many people, to whom I am grateful.

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## **CHAPTER 1 - OVERVIEW**

### **INTRODUCTION**

Research on communication has shown important links between communication processes and group effectiveness. Individual communication behaviors have been consistently related by research to overall organizational effectiveness. (Goldhaber, 1990) Indeed, communication is at the heart of group behavior (Shaw, 1981). This work investigates the relationship between communicative behaviors among members of a team and group performance.

### **TEAMWORK AND COMMUNICATION**

During the past decade, there has been an increasing emphasis on teams and teamwork in the management literature. For example, whereas between 1987 and 1991, the Administrative Science Quarterly and the Academy of Management Journal had six articles including "team" or "teams" in their title, there were 20 such articles between 1997 and 2001. Studies on the effectiveness and performance of work teams have followed two main streams. One has investigated the performance of teams by looking at structural factors that influence team effectiveness. This stream has argued that factors like adequate tools and training, a well defined task, a proper mix of individual skills, appropriate pay / reward systems, and the physical environment are significant

contributors to overall team performance (Hackman, 1987; Goodman et al., 1988; Campion et al., 1993; Cohen and Ledford, 1994). Another stream, rooted in organizational learning approaches argues that cognitive and interpersonal factors such as the ability of team members to address defensive routines, tacit attributions about fellow team members, and barriers to sharing information can significantly affect team performance (e.g., (Argyris, 1989; Senge, 1990)). While the structural perspective has traditionally (e.g., the Hawthorne studies, (Snow, 1939)) relied on an experimental approach to discover the relationship between various factors and team performance, experimentation based on the cognitive perspective is problematic. Several reasons underlie this difficulty, among which are the difficulty in obtaining appropriate sample sizes, the need for lengthy training to become adept at requisite skills, difficulty in manipulating treatments, and the slipperiness of operationally defining a construct such as Argyris' "Model II behavior" in a way that ensures its enactment within a given team. As a result, researchers from the second perspective have largely relied upon rich, qualitative evidence supporting their assertions that team performance is affected by cognitive and interpersonal factors (see, for example, (Argyris et al., 1990: 98-102)).

This dissertation addresses the need for statistical tests of hypotheses rooted in the second stream of research. It investigates approaches to improving team performance based on cognitive approaches to modifying the discourse that occurs within a team. The research applies an experimental design that considers communication in the form of interventions into team dialogue and their effect on surfacing constraints on individual actions. These

interventions are then related to overall team performance. The interventions used are based on a subset of what Argyris calls "Model II behavior". "Model II behavior" is based on the values of seeking valid information, free and informed choice, and internal commitment to choices and monitoring of their implementation. Such values lead to increased learning and effectiveness (Argyris, 1989: 102, 104). This is in contrast to "Model I behavior", based on an actor desiring to achieve goals as her or she defines them (rather than accepting another's goals), the desire to win rather than lose, wanting to minimize eliciting negative feelings and valuing the rational over the emotional. Argyris asserts that behavior based on these values lead to escalating errors and decreased effectiveness (Argyris, 1989: 87).

Additionally, the qualitative portion of this research considers the intertextual aspects of the conversations of high and low performing teams. This analysis springs from postmodern literary theory based on conceptions of intertextuality. Intertextuality, rooted in the works of Saussure (1969), Bakhtin (1988), Kristeva (1980), and Barthes (1977), emphasizes the inherently multi-voiced nature of all utterances. That is, an utterance's meaning is not independent, but derived in part from previous usage, the contexts in which it is used, and the audience. As such, there is a continual struggle for the supremacy of a particular meaning. From the standpoint of intertextuality, the words chosen in the case of the team problem solving exercise that is the focus of this work are borrowings, appropriated from previous discourse heard by the team members and applied to the specific context. The intertextual analysis of these utterances examines the

context, relationships to "outside" texts, and the struggle for supremacy between various voices in the dialogue.

The use of both qualitative and quantitative methods in one study for purposes of triangulation have been advocated by some (Faules, 1982; Flick, 1992) as potentially useful and argued against by others (Anderson, 1987; Bostrom & Donohew, 1992; Burrell & Morgan, 1979) on the basis of incompatible epistemological underpinnings. As suggested by Taylor and Trujillo (2000) and Schultz and Hatch (1996), while there are questions about the ability of multiple methods to "validate" findings in a positivistic sense, multiple methods can access different dimensions of organizational communication, such as (for this research) the effect of interventions on team performance vs. the process of selecting and integrating various texts into a team dialogue. Consequently, the value of approaching the same study from different research traditions lies in the application of various perspectives to the same body of data, which is the goal of this research.

## PROBLEM STATEMENT

This study addresses the problem of performing quantitative evaluations of the effectiveness of components of Model II behavior in improving team performance. Research in Model II behavior has, to this point, involved rich qualitative analyses of dialogue and investigations of how Model II behavior might be acquired. However, there

has been no attempt to rigorously test claims of improvements in team performance due to adoption of Model II behavior. There have been two major impediments to quantitative analysis of the effectiveness of Model II behavior to improve team performance. The first is that Model II behavior is difficult, both to learn and enact reliably. This difficulty raises issues of the validity and analysis of treatments that may be intended to interject Model II behavior into team dynamics. The second impediment is the difficulty of treating large numbers of teams involved in similar tasks with Model II behavior. Since Model II interventions require intense attention to an ongoing dialogue, a trained interventionist would have to devote his or her full attention to an entire team for the duration of their work to provide an experimental treatment. A large number of teams would have to be treated to achieve statistically valid results, entailing an enormous amount of work. Even if this were accomplished, the ability to replicate results from such a study would be doubtful, since the results would probably vary a great deal depending on the skills of the interventionist.

This study deals with these issues by considering only what is hypothesized to be a component of Model II behavior, that which has to do with inquiries to promote the surfacing of information. It uses a well-defined set of inquiries for surfacing information based on a typology from cognitive linguistic approaches to therapy. The specific forms of inquiries used are compared to Model II behavior and shown to closely match examples of inquiries drawn from the Model II literature. Since the interventions are both well-defined and simple, they can be applied to large numbers of teams in a manner

that can be easily replicated. For this research, all teams were involved in solving the same problem, enabling consistent measures of performance.

This method enables this study to address questions that would be difficult to answer using any other approach. Specifically, this study sought to determine:

- Do Model II interventions designed to surface information improve team performance?
- What is the mechanism by which these interventions affect team performance?

## HYPOTHESES

The experimental portion of this research is based on the premise stated by Argyris that valid information is a necessary ingredient for group effectiveness (1990: 99). Surfacing information, particularly concerning constraints and the reasoning behind what is and is not possible for individuals to do in a given situation provides valid information that can have a direct impact on overall team performance. Interventions by Argyris and others conversant with "Model II behavior" include certain forms of questions. An analysis of these forms of questions reveals them to be similar or identical to the forms of questions which have been identified (Bandler and Grinder, 1975) as helping individuals undergoing therapy surface information about their reasoning and constraints that they face. This similarity leads to a basic assumption of this research; that these forms of questions, i.e., interventions to surface information, are a component of Model II behavior.

According to Bandler and Grinder's cognitive-linguistic analysis of approaches to therapy, cognitive processes of generalization, deletion, and distortion impede the ability of individuals to surface information. This suggests that one mechanism by which Argyris' Model II behavior acts to improve performance is by facilitating the surfacing of information. Consistent with Argyris' theories of behavior, this suggests that in group settings, deletions, distortions, and generalizations may be selectively activated to minimize threats and promote personal goal attainment. The result is a reduction in the effectiveness of group problem solving activities during periods when it is particularly important that individuals be able to communicate their reactions and reasoning. But if interventions designed to improve the surfacing of information are administered to the group, it is expected that it will have access to more valid information, and that performance will consequently improve,

Therefore the main hypothesis is that facilitating groups using this component of Model II behavior will improve group performance. This research provides a test of the hypothesis by providing structured interventions to circumvent the effects of generalization, deletion, and distortion into the dialogue of small groups involved in completing a project.

Hypothesis: Interventions using the component of Model II behavior that helps individuals surface information will result in improved team performance.



If this is true, two possible mechanisms may describe the underlying process. First, Model II interventions help teams to surface more information, and this leads, in turn, to higher performance. As more information surfaces, the team is able to use that information to make better decisions, resulting in higher performance. In this model, surfaced information mediates the relationship between interventions and team performance.

Hypothesis: Surfaced information mediates the relationship between interventions and team performance.

In an alternative model, interventions to help individuals surface information do not have a direct effect on the amount of information surfaced. In this model, some other factor induces people to surface information. But when information is surfaced the interventions help express it more completely, leading to higher performance. In this case, the interventions and surfaced information interact to produce high performance. One basis for this model is Argyris' emphasis on governing values as being central to the enactment of Model II and Model I behavior. A governing value for Model I behavior is "winning rather than losing". In contrast, a governing value for Model II behavior is "seeking valid information". If the value of "winning rather than losing" takes precedence, it is expected that an individual would choose to withhold information for personal advantage. Interventions to help individuals surface information would then

have little effect. On the other hand, if the value of "seeking valid information" takes precedence, it is expected that an individual would choose to reveal information so that the team could develop a clear picture of the situation. In this case, interventions would help the members of the team to surface their information more fully, thereby leading to improved performance. This leads to the alternative hypothesis.

Hypothesis: Interventions moderate the relationship between surfaced information and team performance.

#### IMPORTANCE OF THE STUDY

This study is important for five reasons.

First, it provides a test of the effects of an operationally defined approach to interventions designed to improve team performance. This means that the interventions and occasions for their use are defined well enough that they can be replicated in further research.

Second, it provides a theoretical basis for identifying a component of Argyris' "Model II" behavior, namely those dealing with surfacing information. It investigates the effect of this proposed subset of "Model II behavior" separately from any other aspects of that model of behavior.

Third, it tests two potential models for the relationship between interventions to foster the surfacing of information, the surfacing of constraints on individual action, and team performance.

Fourth, it provides a method for groups to self-administer the treatment, removing the need for a skilled Model II interventionist. The interventions are defined well enough that it is possible for unskilled research participants to apply the treatment to teams they are a part of. The background and guidelines for intervening can be read in fifteen minutes or less.

Finally, it applies an intertextual approach to analysis of team dialogue to illustrate the process of selection and distribution of texts and its affect on the outcome of a team exercise. This illustrates more clearly how individual values can result in surfacing or withholding information critical to the success of the team. While intertextual analysis has its roots in literary theory, previous applications to organization studies have been largely devoted to analyses of corporate communications (e.g., (Boje, 2001)). This research demonstrates its value at the small group level.

#### LIMITATIONS OF THIS RESEARCH

Certain conditions beyond the control of the researcher have restricted this study. These conditions have to do with the sampling process, characteristics of the subjects, the measure of surfacing information used, and the independent variable measurement.

Samples were gathered from two universities in the Boston area. The simulation exercise that was the basis of the experience under investigation was a course requirement for the majority of students participating in the research, but individuals were given the option of not participating in the research by not allowing their data to be used. A total of 515 people in 123 teams participated in the exercise, of which 369 people in 77 teams comprised the population sample. In some cases, one or more members of a team did not opt to grant permission for their dialogue to be used as part of the research, resulting in the entire team's removal from the population sample. Other teams were removed from the population sample for various reasons, such as having less than four members, etc. The groups that were removed may differ in some ways from those that remained.

The findings from this research are also limited due to characteristics of the subjects. The exercise was a challenging problem in team decision making that involved cutting costs in a fictitious company in order to balance the budget. While the team interactions were of primary interest, there could have been several subject characteristics that may have affected the outcome. For instance, the ability to type well could have an affect on the amount and quality of contribution by an individual. Similarly, there was an assumption of a basic understanding of how to balance a budget (e.g., revenues must be greater than expenses) that may not have been accurate.

The measure of surfacing information chosen was a count of goals mentioned by team members during their conversation. Team members had three sets of goals included in their exercise packets, termed "Level 1", "Level 2" and "Level 3". Each level identified several goals constraining the member's ability to reach that level. For example, a goal to

achieve Level 3 might be "keep 100 employees", while to achieve Level 2 the goal might be "keep 95 employees". The count of goals mentioned was a verifiable measure of information surfaced. It was also particularly salient, because in general individuals indicated knowledge of their goal levels and often misrepresented them if doing so provided a personal advantage. However, this did not measure the total amount of information surfaced. The results should be considered in light of this choice of measure. Finally, the study was limited due to the independent variable. Significant effects may be due to interventionist skill in applying the interventions used as the independent variable. This was measured in some part by assigning student interventionists who were to administer the treatment interventions to a subset of the teams. However, it was often difficult for these student interventionists to absorb the instructions for applying interventions in the short (less than ten minutes) amount of time available. Another issue was that team members often spontaneously produced treatment interventions by themselves. A separate analysis was done to investigate the effects of such interactions.

### SCOPE AND CONDITIONS

The scope and conditions of this study might limit its applicability in a number of ways. First, it was restricted because the sampling process only involved college students and so may not be generalizable to an older population that is presumably less comfortable with technology... This sample may be more educated than the general public. Second, due to the ages of the participants in the research sample, findings may not be generalizable to the general adult population.

Third, research was conducted in only one area of the country, in and around Boston. Participants were selected from two universities, which may represent a special sub-population

In addition, this research is done using virtual teams. While the dialogue is expected to be similar to that of "real life" situations, there are expected to be some significant effects due to the lack of face to face contact. For example, some studies have found a greater degree of negative emotional expression among computer mediated interactions (Dubrovsky et al., 1991). It also appears that it is more difficult for such teams to achieve a consensus than is the case for face-to-face teams (Hiltz et al., 1986).

Finally, the exercise itself is artificial, both in terms of focus and time limitations. The groups have only forty minutes to interact among themselves and are severely constrained in terms of their attention. The focus is on solving the problem, and, in order to do so there is little time for socializing behaviors.

## STUDY OVERVIEW

The purpose of this research was to examine the effects of treatment with a component of Model II behavior on team performance. The theory behind this research is that particular questions inviting the surfacing of information constitute a component of Model II behavior and that intervening with these questions improves team performance.

An intertextual analysis of the dialogues occurring during team meetings provides an additional perspective on the processes involved.

#### ARRANGEMENT AND CONTENT OF THE FOLLOWING CHAPTERS

The second chapter of this research deals with a review and analysis of the supporting literature relevant to Argyris theories of behavior and cognitive approaches to surfacing information.

The methods and procedures of the study are presented in chapter three. The results of the statistical analysis of the data is presented in chapter four. Chapter five presents intertextuality and provides an analysis based on it. The final chapter is concerned with the summary of findings, discussion, implications, and suggestions for further research.

## CHAPTER 2 – LITERATURE REVIEW

### INTRODUCTION

This chapter first provides summaries of Argyris' theories of behavior (with a particular focus on methods to promote awareness of faulty reasoning and its unintended consequences), and Bandler and Grinder's work on cognitive linguistic approaches to surfacing information. While doing so, it reviews literature on tacit knowledge as a way of understanding the skilful creation of errors by those practicing Argyris' Model I behavior. Argyris views errors relating to poor performance as unintended consequences of faulty reasoning, and asserts that individuals practicing Model I behavior are both skilled at creating errors and unaware that they are doing so. In other words, the ability to create errors is a result of tacit knowledge. Model II behavior acts to interrupt this skilled performance by surfacing information that dislodges the unawareness. Finally, specific inquiries proposed by Bandler and Grinder as a means to help individuals fully express their underlying experience are related to examples from the literature on Model II behavior. These inquiries will form the basis of the treatment interventions in the teams participating in the research.

### ARGYRISIAN THEORIES OF BEHAVIOR

According to Schein, dialogue acts as an ubiquitous engine of learning and change (Schein, 1993). Schein defined dialogue as interactions that create the ability to achieve shared meaning and a common thinking process. He writes, "The most basic mechanism



of acquiring new information that leads to cognitive restructuring is to discover in a conversational process that the interpretation that someone else puts on a concept is different from one's own" (Schein, 1996). It is therefore important to be sensitive to discourse (Weick and Quinn, 1999), what prevents and encourages the verbalization of information, and to consider how it might be improved.

Argyris offers a detailed, cognitively based approach to improving group effectiveness through considering the dialogue that occurs within a group. One of the main arguments he makes in support of his work is the assertion that individuals are often disconnected from the reasoning processes that lead to their actions. This provides important clues as to why individuals are not able to produce their intended consequences, which, in turn reduces the ability of the group to perform effectively.

#### Argyris' X-Y case

Argyris' findings were based in part on research with 1,049 participants who completed his "X-Y" case (Argyris, 1989: 29). In this case, participants are asked to act as consultants helping a superior become more effective in dealing with evaluating and counseling a subordinate. A transcript of the superior's part of the conversation is included in the case. The results indicate that, upon reflection, individuals are able to state what is effective and ineffective about their own and others actions. However, while in the midst of action they are frequently unaware that they are producing actions

contrary to their stated values, which not only produce results they themselves judge to be ineffective, but also which they did not intend.

For example, participants would often evaluate the superior as being blunt and judgmental. Yet, their evaluations were themselves blunt and judgmental. When asked to privately diagnose the case, all of the participants developed diagnoses that contained the same kind of counterproductive features they advised against (Argyris, 1989: 37). These counterproductive features were also produced when they were asked to role-play helping the superior. During the diagnosis and role-play, they were frequently unaware that their actions produced these counterproductive effects. However, upon reflection, they were able to recognize the ineffectiveness of their own actions, though they remained at a loss to determine how to create actions that were effective.

#### Skilful Unawareness

Argyris views these phenomena as resulting from people's disconnection with their reasoning processes. Several features identify these situations (Argyris, 1989: 79). First, when individuals disconnect from their reasoning processes, they are unaware that they are either working from faulty premises and / or making invalid inferences. At the same time, they see their evaluations as concrete and obvious, although they may actually contain abstract ideas and high-level inferences. Consequently, they rarely see the need for publicly testing their reasoning processes. Since they see their conclusions and evaluations as both quite obvious, tests of their reasoning are usually not done. Moreover, not only do they work from faulty premises and arrive at faulty conclusions,

they also do so in a manner that is quite effortless and, therefore, skilful. The unawareness and skill involved suggests a great deal of practice in making these errors, so that the ability to make errors has become tacit. This is supported by research on the characteristics of tacit knowledge, which is where we next turn our attention.

### TACIT KNOWLEDGE AND ARGYRIS' THEORIES

Jensen (1993) declared that "tacit knowledge seems an exceedingly mysterious variable, theoretically and empirically." The thrust of Jensen's position is that tacit knowledge is neither a theoretically coherent nor a psychologically convincing construct. Such a position seems warranted when one considers the range of usages of the term in the organizational literature. From its early description by Polanyi as "what we know but cannot tell" (Polanyi, 1966), the description of tacit knowledge has grown to encompass many seemingly disparate meanings from the general (e.g., intuition (Crossan et al., 1999), common sense (Zeira and Rosen, 2000), and practical intelligence (Somech and Bogler, 1999) (Sternberg et al., 1990)) to the more specific (e.g., "action-oriented knowledge, acquired without direct help from others, that allows individuals to achieve goals they personally value" (Sternberg et al., 1995)).

Given the wide range of usages of the term "tacit knowledge" it is important to be clear about the specific sense one intends. Molander (1992) proposed one framework for identifying the intended sense of usage of the term. According to him, there are three

senses that can be used to categorize how tacit knowledge has been used in the literature.

They are:

- 1) Knowledge that is impossible to verbalize or articulate in words or formulae.
- 2) Knowledge that is taken for granted, either by an individual or within a group or community ("tacitly presupposed").
- 3) Knowledge that has been silenced and is thus left unstated.

The first sense of tacit knowledge, "that which is impossible to verbalize or articulate", is probably the usage which has gained the widest recognition. This sense comes closest in meaning to Polanyi's (1966: 4) original characterization of tacit knowledge, that "we can know more than we can tell". Polanyi illustrated this sense of tacit knowledge with the example of face recognition. It is possible to recognize a familiar face out of a crowd, but it is not possible to exactly describe how we achieve that recognition. A similar oft-cited example is the ability to ride a bicycle. While we may know how to ride a bicycle, it is not possible to verbalize this knowledge in a way that would allow someone who has never ridden before to ride flawlessly at the first attempt.

The second sense of tacit knowledge as "taken for granted" or "tacitly presupposed" is generally applied to the knowledge of craft skills that are best transferred between members of a group by socialization and close personal interaction. This is the sense that is usually applied to tacit knowledge when it refers to the kind of knowledge that is

transferred between individuals through apprenticeships or between organizations via joint ventures (e.g., (Nonaka and Takeuchi, 1995)). Generally, a degree of training and practice is required to polish these skills until they become automatic, i.e., unconscious or "tacit". This sense can also be applied to the development of expertise (Prietula and Simon, 1989) like that available to chess masters (Neisser, 1976). This form of tacit knowledge has also been referred to as "intuition" (Crossan et al., 1999) or "practice wisdom" (Zeira and Rosen, 2000).

The third sense of tacit knowledge ("silenced knowledge") refers to knowledge that is not voiced for one reason or another. It is present when people are not given a voice, have not been allowed to use their voice, or have chosen to withhold their voice, often as a means of resistance (Molander, 1992). Baumard (1999: chapter 4) delineated several reasons for silencing knowledge in his investigation of the non-expressed. These include silencing related to fear of self, others, or authority, and specific pieces of information are not expressed because of non-perception, social construction, or because they have been forgotten.

A prototypical example of "silenced knowledge" is that used by Argyris in his description of "undiscussables", that is, topics, perspectives, or ideas studiously avoided within organizations. As he writes, describing typical organizational dynamics (Argyris et al., 1990: 61):

For example, people automatically withhold thoughts and feelings, or state them in ways that makes it difficult for others to challenge. They speak at high levels of

inference, assume that what they say is concrete and obvious, and avoid creating conditions that might disconfirm their views. They attribute defensiveness and nasty motives to others, do not state these attributions publicly, and act in ways that elicit behavior that they interpret as confirming their attributions. They are predisposed to attribute responsibility for error to others or to situational factors rather than to themselves. Patterns that maintain this situation are treated as undiscussable and are covered over with a layer of camouflage. Many of these features are protected by layers of genuine unawareness and by defenses to maintain the unawareness.

Given the many possible meanings attributed to the term "tacit knowledge", it is worthwhile exploring some of explicit definitions used by researchers in this area.

#### DEFINITIONS AND CHARACTERISTICS OF TACIT KNOWLEDGE

The concept of tacit knowledge was popularized by Polanyi (1966), who is widely quoted as stating, "We know more than we can tell", which falls into the first sense described by Molander (1992). In describing an experiment where participants were subjected to shocks whenever they produced certain syllables, Polanyi described the existence of tacit knowledge and characterized it as consisting of two terms. The first was the shock syllable and the shock associations, the second was the electric shock that followed. Polanyi asserted that the participants' attention was focussed on the shock, resulting in a loss of attention on the syllables and associations that produced the shock. The first term was not able to be explicitly stated and came to be known tacitly. The proof for this lay in the fact that the participants could not explicitly state which syllables were associated with the shocks, though they were able to significantly reduce the frequency of shock-producing utterances. As Polanyi put it, "After the subject had learned to connect these two terms, the sight of the shock syllables evoked the expectation of a shock and the

utterance of the shock associations was suppressed in order to avoid shock." (1966: 9). Reber (1993) later extended and verified Polanyi's theoretical foundation by completing laboratory research which confirmed that complex knowledge could be acquired without intent or awareness.

Knowing more than we can tell. Polanyi explained the effects of unconscious learning by asserting that whenever attention is drawn toward the gestalt of the experience, the particulars are lost to awareness and become tacit knowledge. This theme was taken up by scholars who addressed the issue of experts who lose the "particulars" as they move toward a broad overview of occurrences of import. This attention to the gestalt of a situation has been identified as expert intuition (Neisser, 1976) (Crossan et al., 1999). Crossan, et al, write that experts, using intuition, have no need "to think consciously about action. Having been in the same, or similar, situations and recognizing the pattern, the expert knows, almost spontaneously, what to do. Indeed, if asked to explain their actions, experts may be unable to do so. While the pattern (and associated action) is familiar, the underlying justification has receded from conscious memory. In a simple way, expertise can be thought of as unconscious recollection. This helps explain why expertise is so hard to transfer from one person to another. It is highly subjective; deeply rooted in individual experiences; and very difficult to surface, examine, and explain."

The role of tacit knowledge in practical action. Besides intuition, tacit knowledge has also been cited as the same as common sense, or practice wisdom. Tacit knowledge is a

meaningful and important source of information that influences practitioners' decisions and actions (Schon, 1983; Scott, 1990). Along these lines, a typical description of tacit knowledge which falls into Molander's second category is that used by Zeira and Rosen (2000), who refer to it as the implicit store of knowledge used in practice.

Wagner and Sternberg have generated a stream of research on tacit knowledge springing from this position. They share a perspective on tacit knowledge as providing the ability to enact skilled, practical action. Wagner (1987) focussed on the role of tacit knowledge in permitting the execution of skilled actions. He cited the definition offered by Wagner and Sternberg (1985) as the "practical know-how that usually is not openly expressed or stated and which must be acquired in the absence of direct instruction."

Wagner (1987) categorizes tacit knowledge according to its scope and structure. The scope of tacit knowledge involves the content of a situation (managing self, others, or tasks), the context of a situation (local / short-range or "big picture" / long-term) and one's orientation (idealistic or pragmatic). Four classes modeling tacit knowledge structure were considered by Wagner. Two factor models imply that individual differences in tacit knowledge will be general to each context content, and orientation. Hierarchical models imply that group factors account for shared variance among tacit knowledge scores. Primary ability models imply that shared variance among tacit knowledge scores is explained by a set of independent group factors. Finally, anarchy models imply that there is no common variance or generality in tacit knowledge.



Experimental results indicated that tacit knowledge has a quite broad scope and that the structure of tacit knowledge is characterized by a substantial general factor (i.e., "individual differences in tacit knowledge are best described in terms of a general ability or fund of knowledge").

Wagner, Sternberg, and others built on their previous work on tacit knowledge by moving their research from the laboratory to the workplace (Sternberg et al., 1995). Their definition of tacit knowledge was refined to "action-oriented knowledge, acquired without direct help from others, that allows individuals to achieve goals they personally value. Tacit knowledge is usually not stated explicitly, rather it is implied by an individual's ability. They state that tacit knowledge has three characteristic features. First, it is procedural, intimately related to knowing how to do something, rather than knowing what should be done. As such, when documented it often takes the form of If-Then causal reasoning. Second, it is relevant to the practical attainment of valued goals. Third, it is acquired with little help from others, usually in the context of minimal environmental support. Sternberg, et al, suggest that tacit knowledge is a component of what they call "practical intelligence", which is an essential aspect of success on the job. In their research with managers, they found that tacit knowledge explains a significant portion of the variance in success in business.

In fact, there has been a variety of works pointing out the value of tacit knowledge, both at the individual and organizational level. For example, in educational settings it has

been found (Somech and Bogler, 1999) that students with measured high levels of tacit knowledge tended to do better academically. Other work which verifies the relationship of tacit knowledge to academic success describes tacit knowledge as (Sternberg et al., 1990) "not explicitly taught or even verbalized, but necessary for an individual to thrive in an environment". Tacit knowledge can be taught to students as part of a practical intelligence curriculum (Wagner and Sternberg, 1985) to increase performance.

In the workplace, as well, tacit knowledge has been lauded as a source of increased performance. The level of tacit knowledge held is not only an excellent predictor of management performance (Wagner and Sternberg, 1985), but also has an important role in overall firm competitiveness. Nelson and Winter (1982) considered tacit knowledge, knowledge that cannot be articulated, as analogous to skills or routines that form the basis for organizational capability. In their evolutionary model organizational capabilities influence survival. In this regard, their work laid the foundation for later research on tacit knowledge as a basis for competitive advantage.

Along these lines, Kogut and Zander (1992) looked at how tacit knowledge embedded in work routines and the division of labor, can influence the diffusion of innovation within firms and the appropriation of those innovations by competitors. Leonard-Barton (1995) further developed this perspective by demonstrating how knowledge embedded in people, tools, and practices can develop within and sustain technology-intensive businesses. Tacit knowledge creates barriers to product and process imitability (Barney, 1991)

because it is informal, disorganized, and relatively inaccessible (Wagner & Sternberg, 1985: 439). This creates causal ambiguity, that is, skilled practitioners have difficulty transferring knowledge because they are unaware of the details of their actions (Reed & DeFillippi, 1990).

While tacit knowledge is critical to individual and organizational success, it is important to point out that it can also be a source of failure. There is the possibility that tacit knowledge can take the form of "tacit superstition", created through a process of superstitious learning (Levitt & March, 1988). This can result in "skilled incompetence" (Argyris, 1980). Argyris describes conditions that lead to this outcome (Argyris, 1999):

"Routines are implemented through skillful actions. Actions that are skillful are based largely on tacit knowledge. Such actions become self-reinforcing of the status quo. The self-reinforcing features tend to reduce inquiry into gaps and inconsistencies in the tacit knowledge. When these surface, they are often embarrassing or threatening. Individuals deal with embarrassment or threat with another set of skillful -- hence tacit -- actions. These actions are counterproductive to effective management."

It is such skilful action that the participants in Argyris' X-Y case exhibited when they were able, seemingly without effort or awareness, to produce errors due to reasoning from faulty premises which created invalid conclusions.

## DYNAMICS MAINTAINING UNAWARENESS OF ERRORS

An unawareness of errors effectively inhibits correction. However, the question arises, what maintains the unawareness? Argyris (1989: 83) identifies three factors that produce unawareness. The first is due to the manner in which the errors were created. Argyris asserts that because the errors were created skillfully, they are also below the level of awareness. In essence, the ability or skill used in making errors is tacit, and it is this very skillfulness, as we have seen in the discussion of tacit knowledge, that prevents the errors from reaching awareness.

### Model I Values.

The second factor that promotes unawareness has to do with the “taken for granted” (hence, also tacit according to Molander’s second sense of the word) values held by individuals. According to Argyris (1989: 83), there are four values individuals generally use to govern behavior that act to maintain an unawareness of errors. They are:

- 1) Not expressing negative feelings
- 2) Remaining in unilateral control (i.e., achieve goals as unilaterally defined by an actor)
- 3) Striving to win and not to lose
- 4) Withholding valid feedback lest the other person become emotionally upset and events go beyond control (i.e., maintain rationality).

These are the four governing values identified by Argyris as indicative of what he calls “Model I” behavior. These values lead to “defensive interpersonal and group relationships, low freedom of choice, and reduced production of valid information. There

are negative consequences for learning, because there is little public testing of ideas. The hypotheses that people generate tend to become self-sealing” (Argyris, et al, 1990: 89). When individuals in a group interact in accordance with these values, particularly in difficult or threatening situations, they create “conditions of undiscussability, self-fulfilling prophecies, self-sealing processes, and escalating error, and they remain unaware of their responsibility for these conditions” (Argyris, et al, 1990: 93). Groups and organizations in this situation have great difficulty discovering or inventing solutions that require challenging or changing underlying norms. Information that might increase their vulnerability to “losing” is often withheld or distorted. Group dynamics tend to decay into dysfunction, evidencing win/lose thinking, groupthink, or enforced conformity. They also tend toward dysfunctional activities, such as outright deception, and actions to avoid blame. These activities can not be openly discussed, since to do so would be viewed as disloyal, “causing trouble”, or a threat to the organization. Also, since the very existence of errors that are not corrected can be a source of vulnerability (hence a threat to the governing value of “winning, rather than losing”), they tend to be camouflaged by hiding, denial, or disguise (Argyris, 1989: 93). The very fact that camouflage exists is also camouflaged. Hiding, distorting and withholding information or feedback reinforces the production of errors since to be effective it must keep them below the level of general awareness.

## Unawareness as a Result of Unsurfaced Reasoning

Argyris says that the third factor promoting unawareness occurs at the level of individual behaviors. Individuals tend to speak using unillustrated attributions (i.e., without including the reasoning that led to the evaluation) and evaluations, using high levels of inference, yet act as if they believe the evaluations and attributions were concrete and obvious. Without the reasoning underlying a statement, it is easier to discount or misinterpret what someone says.

This factor provides an important key to helping individuals and groups quickly become aware of the errors they are making and act to improve their performance. Because individuals are skilled at creating errors, because the skills have been practiced over a long period of time, the ability to create errors is largely tacit. One cannot quickly unlearn such skills. Similarly, basic values governing behavior are likely to be deeply embedded and difficult to revise in the short term. Helping individuals to illustrate their attributions, however, is something that can be done online during a conversation relatively easily. Furthermore, it is possible that such interventions can act as a catalyst to help individuals both dismantle their skillfulness at creating errors and reconsider the values used to govern their behavior. Argyris describes this process succinctly when he writes (1985: 261-262):

“If we strive to illustrate evaluations and attributions, to test them publicly, and to encourage inquiry into our actions, we will soon find ourselves describing the reasoning that led to the actions. We will also be seeking to understand the reasoning of others. The more we make our reasoning public and subject to inquiry, the more we are predisposed to communicate it as clearly as possible, and

the more we make it subject to public testing, the more we will strive to make our reasoning processes as compelling as possible ... [Another result is that some] of our most basic operating assumptions begin to change.”

## MODEL II BEHAVIOR

In fact, illustrating evaluations and attributions and the questions that help individuals do so are an integral part of what Argyris calls "Model II" behavior. This model of behavior is an alternative to Model I, in that it is designed to facilitate awareness and reevaluation of the reasoning processes that lead to errors as well as improving individual and organizational learning and performance. Model II behavior has three governing values: valid information, free and informed choice, and internal commitment to choices that are made. Individuals practicing Model II will both advocate their position and invite "others to confront one's views, even to alter them, in order to produce action which is based on the most complete, valid information possible and to which people can become internally committed" (Argyris, 1989: 103). Attributions and evaluations are coupled with the directly observable data and alternative interpretations are encouraged directly through inquiry.

As is evident from the previous discussion, inquiry is an important component of Model II behavior. It is used for several purposes, such as helping others surface their reactions, unearth reasoning, illustrate attributions and evaluations, and, eventually, to facilitate an awareness of the tacit processes that lead to defensive reasoning and the production of errors. In fact, there are various archetypal questions that repeatedly reoccur among

practitioners of Model II behavior. These questions are often adopted as “recipes for action” by novices learning Model II and may play an important role as a steppingstone to the deeper understandings and skills held by those proficient in Model II. Some examples of recipes that have been explicitly noted in this manner are (Putnam, 1991) the fragmentary questions, “what prevents you from (...)?”, “what have I said or done that leads you to (...)?”, and “what would lead you to (...)?”.

While it is interesting that these recurring questions are used to help individuals explore their reasoning, it is perhaps more interesting that the same sort of questions have been identified by Bandler and Grinder (1975) as important in another field, individual therapy.

#### BANDLER AND GRINDER’S COGNITIVE-LINGUISTIC APPROACH

Similar to Argyris’ cognitive approach to group dynamics, Bandler and Grinder approach their analysis of methods of individual therapy from the standpoint of cognition. Both Argyris and Bandler and Grinder emphasize forms of inquiry that are designed to help individuals surface their reasoning (for example, illustrating one’s evaluations and attributions). However, while Argyris has a focus on group dynamics and deals with the social realm, Bandler and Grinder developed a meta-theory of individual therapy based on cognitive barriers that prevent individuals’ full expression of their reasoning. Their work (Bandler & Grinder, 1975) presents a typology that both operationalizes and offers an expanded explanation of effective inquiries, including many of the archetypal, recurring questions referred to by Action Science researchers as “recipes”. The



following sections will briefly describe Bandler and Grinder's typology and relate it to various inquiries garnered from Argyris' examples of Model II behavior.

### Barriers to Surfacing Information and Their Remedies.

Bandler and Grinder suggest that an effective approach to improving the ability to surface reasoning and information is to deal with the cognitive and social barriers that block full expression. They (1975) suggested a typology of three barriers to the expression of information by an individual. The barriers are 1) generalization, 2) deletion, and 3) distortion. For each of these barriers, they suggested specific interventions to facilitate expression. Though Bandler and Grinder's model and interventions are based on approaches to individual therapy, there is a clear relationship to work with groups and teams to support the sharing of understanding and experiences. Among these are research on dialogue and organizational learning (for example, (Isaacs, 1993; Schein, 1993; Senge, 1990)).

A simplified description of Bandler and Grinder's analysis of barriers to the full expression of reasoning and information follows, as well as their suggested interventions to help make this information explicit. To show that many of the interventions are a part of Model II behavior, samples from research on Model II are also included.

Generalization. Generalization occurs when one or a few experiences are used to represent all experiences in a particular category. Specific activities or individuals are replaced by global descriptions. To illustrate; words like "always" and "never" indicate generalization. In addition, "Mike's performance has been poor", would be a generalization unless every single action taken by Mike has been lacking.

According to Bandler and Grinder, two classes of generalizations can occur, which they term "Unclear Nouns or Arguments" and "Nonspecific Verbs".

#### 1. Unclear Nouns or Arguments

This kind of generalization occurs when a specific individual, party, or event is replaced by a global group and is indicated by the use of words like "everyone, people, men". For example, "Everyone wants me to X", contains the unclear noun "everyone".

The cue for this form of generalization is a "non-referential index", that is, a noun or event that does not refer specifically to a particular individual, party, or event.

Bandler and Grinder suggest two simple questions to get the details, "Who, specifically...?" and "What, specifically...?" They provide the example, "It's painful for us to see her this way". Suggested inquiries would include: "Who, specifically, is full of pain? Who, specifically, is 'us'? What, specifically, is 'this way'?"

In one Model II example, Argyris suggests that the client be helped to surface directly verifiable information by requesting examples or identifying a specific individual behavior (within the group) (Argyris, 1971: 83). He provides the following example:

A: It constantly comes up. Somebody says, "Well you said this; what did you mean by that?" The inference is that something different was meant than what was said. I can give examples. It is disturbing to people because we blow it all out of proportion.

INT: I, too, would be concerned if issues were blown out of proportion. Could you give us an example?

Argyris' question, "Could you give us an example", has the same intent as asking for the specific event, i.e., "What, specifically, occurred?"

## 2. Nonspecific verbs.

This kind of generalization occurs when a specific action is replaced by a global verb that is hard to visualize. For example, "Let's just discuss it". If the exact course of action is difficult to visualize, the verbs are not specific.

Bandler and Grinder suggest intervening to deal with this form of generalization by asking for the specific action that is being suggested by asking questions like:

What, specifically, are you suggesting?

How, specifically did that occur?

Or...

How, specifically, ought we to do that?

Argyris' examples of Model II suggest also that it is important to surface the specifics of action as a part of the "directly observable behavior". However, he at times may go a step further, by suggesting that individuals' describe their reasoning for making such statements at a particular time. For example, consider the following dialogue (Argyris et al., 1990: 347):

Doug: Could I cut in? I feel you're both painting yourselves into a corner. Marilyn, I wonder if we could just talk about what happens in terms of painting into corners, and just discuss it and maybe come up with a way that that wouldn't happen.

Interventionist: If I could just point to "just discuss it," "maybe we could come up with a way," is the equivalent of "if you would just be in touch with". Do you agree? What is it you want her to do?

In this case, the interventionist's move points out that the suggested action is unclear. The question that then follows ("What is it you want her to do?") has the same intent as, "How, specifically, do you plan to 'just discuss it'?" The aim is to bring the underlying reasoning of what is meant to the surface so that it can be consciously considered.

Deletion. Deletion occurs when some aspect of the individual's information or understanding of the situation has been left out. Deletions in the context of a group can be considered in at least two ways. One way is to consider them at the purely individual level, which is relevant to the therapeutic approach taken by Bandler and Grinder, where an individual leaves out material relevant to his or her own personal experience. Another perspective is to consider deletions in the context of the group, as is the case in withholding one's attitudes, perspectives, or feelings about another or the actions of the

group itself. For example, "It's better to talk to Mike about this first," does not mention what this option is being compared to. The question "Better than what?" is not answered. Likewise, when someone says, "Your performance is not up to standard", the specifics of what standards have not been met as well as how the performance is not perceived to be meeting those standards are missing. Another example of deletion is the self-censorship that occurs when an individual in a group withholds impressions he or she believes would reflect negatively on other members or differ with the direction the group is taking.

Deletions present an impoverished view of the world, bereft of information about the underlying reasoning or understanding which forms the condition. Bandler and Grinder assert that deletions typically occur when a client has a perception of being stuck, blocked, or doomed in some way. Such is the case in the social rule "keep negative reactions private", which Argyris describes as a protective strategy (Argyris et al., 1990: 293). This rule is enacted when an individual does not share his or her negative feelings with the group. There is often an underlying dilemma faced when deciding to keep negative reactions private. The dilemma is whether to state one's views and potentially resolve the situation, at the risk of negative consequences, or to not state one's views and face the possible continuation of a less than satisfactory condition.

Four kinds of deletions can occur, which may be concisely termed "Clearly and Obviously", "Comparisons", "Can't, Impossible, and Unable", and "Advocacy without illustration".

## 1. Clearly and Obviously

This class of deletion is indicated by an adverb ending in -ly, and usually involve statements regarding something that is taken for granted. For example, "He was clearly up to something." There may also be a removal of the -ly by using a verb form, e.g., "It was clear to me that he was up to something." The deletion occurs because the supporting data (i.e., either who it is clear to or how did the person know that he was up to something) has not been stated.

Bandler and Grinder suggest that one appropriate question to recover the deletion is "To whom is it obvious?" However, this case can also be considered as a "taken for granted" evaluation without the supporting data. When someone advocates a position without providing an illustration of their reasoning, an appropriate response from the Model II perspective is to prompt him or her to provide illustrations of the directly observable data that led to the evaluation. This might be accomplished by asking questions such as, "Can you give me specific examples?", or "What leads you to see it that way?" (the latter being one of the Model II "recipes for action" (Putnam, 1991)).

Thus, Model II interventions to deal with these cases can therefore include questions like:

What leads you to see it that way?

Or...

Can you give specific examples?

For example, "What did he do that made it obvious to you that he had been drinking?"

## 2. Comparisons

These involve comparatives and superlatives, such as:

A) Adjectives ending in "...er" or "...est" (faster, smarter, best)

Or

B) More/less or most/least plus adjective (more interesting, most intelligent, etc.)

Examples of comparisons would include: "Its better if we don't lay off people" and "Your performance is better."

In these kinds of deletions, there is an implied comparison, which has been left out.

Thus, Bandler and Grinder suggest the question, "Compared to what?"

Donald Rossmoore (1984), in his dissertation on Argyris and Schon's work, identified this type of interaction as "error-prone". The underlying data and reasoning illustrating the comparison is not present. To craft this interaction in terms of Model II, one would describe the comparison in a way that can be operationalized, such as (using Rossmoore's example), "Your performance has been getting better. You were able to handle five projects this year all under budget and within deadline." Seen from a Model II perspective, the issue is one of appropriately illustrating one's attributions. If another does not adequately provide the information they can be prompted for it by first, probing for the missing comparative. Then asking for specifics which support the comparison, e.g., "How, specifically, do you see it this way?" or "What leads you to see it that way?".

## 3. Can't, Impossible, and Unable

Another set of cue words reveal tacit rules or models governing what is not possible from an individual's perspective. Bandler and Grinder provide these examples, "It's not possible...", "You can't...", "No one can...", and "... not able to...". Other cue words or phrases are, not possible, can (as in, "no one can"), may (as in "no one may"), can't, able (as in "no one is able to..."), impossible, and unable.

To surface the underlying tacit information, we need to know what makes the specified action impossible. Appropriate questions suggested by Bandler and Grinder include:

What makes it impossible?

What prevents you from...?

What blocks you from...?

What stops you from...?

These or similar inquiries are crucial to surfacing unspoken, tacit information so that it is both available to others in the group and may be weighed in the light of the present circumstances.

Argyris (1985: 138) states that the rules governing what is possible or impossible in a group are often indicators of defensive loops that have developed between the members. The defensive loops may be surfaced when some individuals say, "Our planning process has always been that way," or "It is unlikely to change." Such statements are cues of organizational errors that the respondent believes exist and that are unchangeable.



Argyris suggests that after asking the question, “What, in your judgment, prevents them from being changed?” an appropriate next step would be to check with other members of the group to see if the rule is shared, e.g., “Does anyone else see things differently?”

#### 4. Advocacy without illustration

This kind of deletion occurs when tacit reasoning or rules are called upon to support a course of action. The rules themselves or the reasoning behind them is not explicitly stated. Statements such as, "You have to...", "It is necessary to...", "I must...", or "We should..." are cues to the existence of such underlying rules.

Marasigan-Sotto (1980), in her work on Model II behavior, cites these behaviors as examples of advocacy without illustration. For example, she states:

“The person may have personal motives, beliefs, or proposals which he tries to maintain, pleads in favor of, or defends.

##### Indicators

Generally, the speaker speaks about his position on certain matters.

##### Common cue words are:

- Should, has/have to
- Must
- Obligated
- Encouraged
- Expected”

As with any advocacy, the effort should be to assist the client in illustrating his or her beliefs. Several approaches may be helpful at this point.

When faced with such an advocacy, Bandler and Grinder suggest the question, "Or what will happen?" And further suggest the question, "What leads you to see it that way?"

Distortion. This occurs when the connections between parts of a person's expressed information are misrepresented, by being twisted out of a normal or proper relationship. One way this may occur is when reasoning is stated in a way that suggests questionable veracity. For example, "Mike forced Mary to weigh 300 pounds" is an obvious distortion that is easily recognized, since in the realm of normal experience it is not possible to force another person to achieve a particular weight. By the same token, "You are preventing me from stating my views" is often a similar distortion, unless, of course the speaker has been gagged and bound. Though there are several kinds of distortions, three in particular seem to be relevant to Model II. These are termed "Mind Reading", "Presuppositions", and "Forcing or Making".

#### 1. Mind reading

Bandler and Grinder describe this as "the belief on the part of the speaker that one person can know what the other person is thinking and feeling without a direct communication on the part of the second person." They cite the following examples:

"Everyone in the group thinks that I'm taking up too much time."  
"Henry is angry at me."  
"I know what makes him happy."

Another version of this is the presupposition that some person is able to read another's mind. For example:

"If she loved me, she would always do what I would like her to do."

"I'm disappointed that you didn't take my feelings into account."

Bandler and Grinder suggest that an option is to ask how, specifically, the client knows that what is assumed is true, e.g., "How do you know, specifically, that he doesn't consider your feelings?"

In Model II behavior these interactions would be classified as negative evaluations, delivered at a very high level of inference. Model II suggests that the emphasis be on helping others to illustrate their attributions by citing the directly observable data which led to their conclusion, and then connecting that data to the high level attribution. Argyris (1985: 138) suggests two specific inquiries to help bring the understanding of the situation to the surface:

First, ask the individuals to illustrate their evaluations with examples.

Second, help them to make explicit the reasoning they used to arrive at the evidence.

The question proffered by Bandler and Grinder, "How do you know, specifically, ... " is useful in fulfilling the intent of Argyris' rules.

## 2. Presuppositions

Presuppositions are facts that must necessarily be true for an assertion to make sense. Bandler and Grinder provide the example, "I'm afraid my son is turning out to be as lazy as my husband." To believe the statement we must believe that the husband is lazy.

Bandler and Grinder suggest bringing the presupposition out in the open for challenge by identifying it and asking how, specifically, it is true. For example, "How, specifically, is your husband lazy?"

Another example from Bandler and Grinder; "If my wife is going to be as unreasonable as she was the last time I tried to talk to her about this then I certainly won't try again." "What, specifically, seemed unreasonable to you about your wife?"

Argyris would define these as attributions at high levels of inference and assist the client in bringing out the directly observable data (the experience) that led to the attribution. For example, "I realize my husband doesn't love me" can be made more explicit by the question, "What has your husband said or done that makes you believe that he doesn't love you?"

In general, questions like the following can be asked:

How do you know, specifically, that X?

What has happened that leads you to believe Y?

### 3. Forcing or Making

These distortions have to do with relationships of assigning responsibility to others for issues that rightfully belong to one's self. For example, "I had to get rid of ten percent of my employees." The distortion occurs because, in reality, there are usually choices made and by claiming that force was involved, one pushes the responsibility for one's actions onto others. A similar statement is, "This group makes me feel insignificant." Ill-formed distortions are sometimes expressed as a synonym without the 'makes', as in, "You bore me" or "His ideas insulted me." ("You make me feel bored" or "His ideas make me feel insulted.")

The perspectives of both Bandler and Grinder and Argyris are that no one can create an emotion in another. By assigning responsibility for emotions to others, the individual absolves himself or herself of responsibility for a particular action.

Bandler and Grinder suggest that to challenge this type of distortion one needs to assist the client in taking responsibility for his or her own responses. Here is an example.

Ask: "Do you feel (a certain emotion) every time (these circumstances occur)?"

If Yes - Then ask how, specifically, this occurs.

If No - Then ask what is different about times that these circumstances fail to have their automatic effect.

Argyris (1985: 226) addresses a related situation by developing a rule similar in part to that suggested by Bandler and Grinder.

Rule: When someone makes an attribution about others that justifies his behaving in ways that contribute to the maintenance of a problem, ask him to illustrate what experiences have led him to make that attribution.

For example, "I have to act this way because X will never change". One may ask, "What experiences have you had that have led you to conclude that X will not change?"

Argyris also addresses the issue of individual's acknowledging their own responsibility for their reactions (Argyris & Schon, 1974: 122) when confronted with the statement, "The instructor makes me feel intimidated."

Argyris responds with, "What do I do that makes you feel intimidated?"

He then goes on to test whether others feel that way as well, and then whether others would prefer that he acted in other ways that were not so intimidating.

#### SUMMARY OF INQUIRIES USED IN THIS RESEARCH

The common thread in the work by Argyris and Bandler and Grinder is the use of inquiry to help individuals surface information regarding their underlying reasoning. While there may not be a perfect correlation between the specific inquiries suggested by both for particular circumstances, the overall similarity is striking. Bandler and Grinder's work provides a framework for and expanded understanding of the practice of Model II, as well as a very specific operationalization of cues for action and suggestions for inquiry

based on those cues. While it is not a complete description of Model II behavior (for example, it does not include criteria for helping people frame their statements), it seems reasonable to say that Bandler and Grinder have described the component of Model II behavior that is designed to help individuals overcome unawareness by surfacing their underlying reasoning. Since an anticipated outcome of Model II behavior is increased team effectiveness, it is hypothesized that a treatment with the specific operationalized inquiries suggested by Bandler and Grinder would also act to increase team effectiveness.

The specific inquiries used are summarized in Table 2.1, which was used as a guide to intervening during this research.

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Insert Table 2.1 here

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## OVERVIEW OF THE NEXT CHAPTER

The specific interventions described above form the basis of treatment interventions applied to teams involved in this research. The groups had from four to six members, working together in a "virtual team" on a simulated business problem. Virtual teams working on a business simulation provide several advantages to research on dialogue, including the assurance of similar context for all participants and the easy capture of team

dialogue. More than 500 individuals participated in the research from two universities in the Boston area. The next chapter addresses the methodology used in this study.



## CHAPTER 3 - METHODOLOGY

### INTRODUCTION

This chapter presents the methods and procedures of this research. The chapter consists of six sections: Design of the Study, Description of the Hypothesis, Description of the Subjects, Description of the Procedures, Description of the Research Materials, and Treatment of the Data.

### DESIGN OF THE STUDY

The experimental portion of this research tests the effect of interventions designed to surface information on team performance. The teams participating in this study were divided into four groups; two that received the treatment and two groups that were not treated.

One of the groups receiving treatment had an external facilitator who applied the treatment. The researcher served as the external facilitator. Interventions into the groups' dialogue occurred as the teams worked on solving the business simulation in chatspace. The external facilitator followed the instructions for intervening described on the overview of inquiries table at the end of Chapter 2. This group was called the "Externally facilitated – treatment group".

The teams in the other treatment group had a team member who was assigned the role of facilitator. This internal facilitator was given the same set of intervention instructions as the external facilitator and directed to intervene in the team's interactions by asking questions according to the instructions. This group was called the "Internally facilitated – treatment group".

The purpose of applying the interventions in two ways has to do with the potential for the Hawthorne effect. It is possible that a team's performance might be affected due to having an outside facilitator intervening. Comparing the differences between an external and internal treatment facilitator allows investigation of this concern.

There is another important reason for including internal facilitation in the study. It would be generally expected that an expert facilitator brought into the group might be able to help a team improve its performance. But it is less likely that an internal, non-expert, facilitator who has only read several pages describing suggested interventions would be able to help a team improve its performance. If only reading a few pages describing treatments allow internal facilitators with no special training to significantly improve performance over a group that has received no treatment, this indicates that such treatments can provide an economical means to improve overall team performance. While it is not expected that allowing a team member to merely read a few pages of instructions can improve performance as much as an expert facilitator, the cost – benefit

ratio may be much higher. Ten minutes of reading by a team member is far less costly than hiring an expert facilitator to sit in on a team meeting.

Two groups did not receive treatment. The teams in one of these groups had a member of their team who was given the role of internal facilitator. This internal facilitator was given only general instructions for facilitating or intervening, such as “If the group does not seem to be working together effectively, you might help them analyze what is going wrong.” This group allowed comparisons between the effects of an internal facilitator who was directed to administer the treatment and an internal administer who was not directed to do so. It also allowed a check for any effects that might be due to having an internal facilitator, whether or not that facilitator delivered the treatment. This group was called the “Internally facilitated – no treatment group”.

The other group that did not receive a treatment was composed of teams that had no facilitators at all and did not have the treatment formally applied. This group was called the “Control group”.

Table 3.1 summarizes the assignment of groups within this design.

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Insert Table 3.1 here

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## DESCRIPTION OF THE HYPOTHESES

The literature cited in Chapter 2 suggests that surfacing information can interrupt the skilled unawareness leading to the production of errors. The interventions suggested by Bandler and Grinder to surface information are, in many cases identical to those practiced by Argyris. Since Argyris' Model II behavior has been linked the reduction of errors, thus improved performance, it is hypothesized that treatment with a subset of Model II, specifically, the interventions suggested by Bandler and Grinder, will lead to improved performance. This hypothesis can be stated more formally as:

Hypothesis 1) The performance of teams treated with interventions to surface information will be significantly higher than those not treated.

The corresponding null hypothesis is:

NH1) The profitability of teams treated by interventions to assist in the surfacing of information is not significantly higher than teams with no treatment.

Comparing the mean profitability between the two groups that received the treatment and the two groups that did not receive treatment will test this hypothesis.

Several related hypotheses are suggested by the four groups, “Externally facilitated – treatment”, “Internally facilitated – treatment”, “Internally facilitated – no treatment”, and “Control”.

First, it is expected that the use of an external facilitator to provide the treatment will act to improve performance more than either the internal facilitator providing treatment or no treatment at all. This is because it is expected that the external facilitator will follow the intervention guidelines more closely than an internal facilitator given treatment guidelines. It is also because it is expected that treatment will be more effective in improving performance than no treatment.

This leads to the following hypotheses and null hypotheses.

Hypothesis 2a) The profitability of “Externally facilitated – treatment” teams will be significantly higher than that of “Internally facilitated – treatment” teams.

NH 2a) The profitability of teams in the “Externally facilitated – treatment” experimental group is not significantly higher than that of teams in the “Internally facilitated – treatment” experimental group.

Hypothesis 2b) The profitability of “Externally facilitated – treatment” teams will be significantly higher than that of “Internally facilitated – no treatment” teams.

NH 2b) The profitability of teams in the “Externally facilitated – treatment” experimental group is not significantly higher than that of teams in the “Internally facilitated – no treatment” experimental group.

Hypothesis 2c) The profitability of “Externally facilitated – treatment” teams will be significantly higher than that of “Control Group” teams.

NH 2c) The profitability of teams in the “Externally facilitated – treatment” experimental group is not significantly higher than that of teams in the “Control” experimental group.

Along the same lines, it is expected that treatment by an internal facilitator will improve performance over that of no treatment at all.

Hypothesis 2d) The profitability of “Internally facilitated – treatment” teams will be significantly higher than that of “Internally facilitated – no treatment” teams.

NH 2d) The profitability of teams in the “Internally facilitated – treatment” experimental group is not significantly higher than that of teams in the “Internally facilitated – no treatment” experimental group.

Hypothesis 2e) The profitability of “Internally facilitated – treatment” teams will be significantly higher than that of “Control Group” teams.

NH 2e) The profitability of teams in the “Internally facilitated – treatment” experimental group is not significantly higher than that of teams in the “Control” experimental group.

There are also several hypotheses that can be made about the model explaining the relationship of interventions, surfacing information, and performance.

Two models of the relationship between these variables were considered for this research. The first hypothesizes that the surfacing of information mediates the relationship between interventions and team performance. This is based on the assumption that inquiries designed to surface information lead to greater surfacing of information, which, in turn, leads to higher performance, as illustrated in Figure 3.1.

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Insert Figure 3.1 here

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This leads to the following hypothesis:

Hypothesis 3a) The surfacing of information mediates the relationship between interventions to surface information and team performance.

The second model hypothesizes that the surfacing of information and interventions interact to enhance team performance. In this model, interventions do not lead to surfacing information, but when surfacing occurs the interventions make the surfacing more effective. This is in accord with Argyris' assertion that individuals follow behavioral strategies congruent with their governing values (Argyris, 1989: 86). If an individual holds the Model I value of "winning rather than losing", interventions to surface information will not immediately change that person's value-system. He or she will likely follow a strategy to hold information private if doing so creates a personal advantage. This leads to less profitable team decisions, since they are based on incomplete information. On the other hand, if an individual holds the Model II value of "seeking valid information", the interventions should allow that person to surface information more effectively. The interventions will assist in overcoming the cognitive barriers of deletion, distortion, and generalization so that the team has access to more complete information to make better, more profitable, decisions. This model is illustrated in Figure 3.2.

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Insert Figure 3.2 here

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This leads to the following hypothesis:

Hypothesis 3b) The surfacing of information moderates the relationship between instances of interventions to surface information and team performance.

## DESCRIPTION OF THE SUBJECTS

### Overview of Subjects

This research was conducted at two universities in the Boston area, University A and University B. The exercise used to gather the data for the research was completed as either a voluntary "extra credit" exercise (at University A) or as part of normal course requirements (at University B). At University A, all participants completed the exercise as part of a Junior/Senior level Organizational Behavior course. At University B, some participants completed the exercise as part of an MBA level class on teamwork, while the majority completed it as part of a freshman level course on teams and organizations. An overview of the participants is described in table 3.2.

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Insert Table 3.2 here

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Preliminary analysis of the data from the exercise indicated that there were significant differences in the distribution of performance scores across levels (MBA, Juniors/Seniors, and Freshmen). The MBA's and Juniors/Seniors did much better on the exercise than the Freshmen. This may be due to the differences in experience with the type of problem faced in the exercise between the groups. It is possible that the treatment effects of interventions to surface information are accentuated when teams find themselves in ambiguous situations. In any case, this research focussed on the Freshmen teams since other levels did not have sufficient statistical power and combining levels was infeasible.

#### Freshmen Teams

The introductory course on teams and organizations was required for all Freshmen at University B. Approximately half of the freshmen would take the course during the fall semester, and the other half would take the course during the spring semester. During the fall semester, when the data was gathered for this research, participation in the exercise was a requirement for completing the course. So about half of the incoming freshmen (455 students) class participated in the research.

However, not all those who participated in the research are considered research subjects. One factor causing some teams to not be considered subjects has to do with the structure of the exercise. The exercise required a minimum of four members per team. Twenty-

three teams were disqualified from the analysis because they had less than four members participating in the exercise.

Also, because this research involved human subjects it was subject to Institutional Review Board (IRB) oversight. One of the requirements of the IRB overseeing this research was that the resultant data not be used for research without the participants' informed consent. Since the analysis is done at the team level, this meant that if any one member of a team did not give consent, the data for that team was not used in the research. Nine additional teams were removed from the analysis because one or more members did not give consent for his or her data to be used for research.

Table 3.3 provides an overview of the Freshmen subjects in this research, including the number of teams and individuals in each of the disqualified, non-consenting, and experimental group, as well as their gender distribution. Some of the non-consenting participants did not return consent forms and their gender is unknown.

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Insert Table 3.3 here  
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While most of the participants in the research were incoming freshmen, some were transferees from other schools or students who had taken time off and were returning to school. These students were enrolled in the entry-level course in teams and organizations, and so were participants in the research. Table 3.4 provides information

about the amount of college experience held by subjects in the research. 81% (369) were entering freshmen and so had been enrolled for one semester. One individual who was part of a team disqualified because it had too few members had been enrolled for six semesters.

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Insert Table 3.4 here  
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## DESCRIPTION OF THE PROCEDURES

### Locating Sites

To locate universities for research sites I emailed a brief description of the exercise to management departments in over 200 universities throughout North America. In the email I described the exercise as a team decision making game that could be used as part of a course in organizational behavior, teamwork, or decision making. Among those who expressed interest was a professor at University B. This professor requested a trial run of the exercise in one of the classes taught at University B. The trial run was received favorably, though some minor changes having to do with the materials and organization

were suggested. In the summer of 2001, plans were made to have the exercise be included as one of the experiential exercises required for freshmen at University B.

### Overview of University B Setup

Freshmen at University B are organized into teams during the first week of the fall semester. To schedule teams for the exercise, it was decided that signup sheets would be posted with the times and dates that I, the researcher, could administer the exercise. The exercise was administered in one of University B's computer rooms, which had 40 networked workstations, shown in Figure 3.3.

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Insert Figure 3.3 here

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The networked workstations were required for the exercise because teams were only allowed to communicate with one another electronically during the exercise. Because there was limited seating, a maximum of six teams could participate in the research at once. So each time available had six slots open for teams. Team names and the number of people on each team were also requested on the signup sheets.

The day before each exercise I would note the number of teams and the number of participants per team from the signup sheet to ensure that enough materials were available for the exercise.

### The Exercise

The exercise used in this research asked team members to play the role of members of a fictional company that was operating at a loss. The goal was for the team to determine how to make the company as profitable as possible by reducing expenses and increasing revenue. This was to be accomplished by layoffs, reducing salaries, and either reducing the development budget to save money or increasing it to earn more money. Each of the players had various constraints on the actions they could take built into their personal profile. A prize of \$500 was offered to the team that was able to produce the greatest profit.

However, as is often the case in "real life", the exercise involved mixed motivations and incentives for individuals to try to do better than their fellow team members. Each team member (except for the facilitators) had a set of three individual goals. Achieving the highest, level 3, meant that the team member "gave" the least to the team. Achieving the lowest, level 1, meant that the team member "gave" the most to the team. For example, the level 3 goal of the Finance Director included retaining three managers in his or her department, while the level 1 goal included only retaining one manager in the Finance

department. As a minimum, everyone was required to achieve level one goals. As an incentive for achieving a higher level goal, the \$500 prize was to be distributed among the members of the winning team according to their individual goal attainments. The example used when describing this when introducing the exercise was this: “Suppose a four-member team wins the prize by creating the highest profit. If one member of the team achieved a level 3 while the other three members of the team achieved level 1, the member who achieved level 3 would have gotten half the goal points for the team. Therefore, that member would receive half of the \$500. Each of the other three members would receive one-sixth of the \$500, or \$86.67.”

Of course, the way to attain maximum profit was to have everyone on the team at level 1. However, the incentive to do better than one's teammates usually resulted in members' negotiating about and/or misrepresenting the goal level constraints they were facing. Information about level 1 goals was held closely, and the goal constraints generally were not surfaced.

There were four roles required for the exercise: Union Representative, Director of Personnel, Director of Finance, and Director of Development. All qualified teams had members playing these roles. Additionally, teams that were part of the “Internally facilitated – treatment” group included a facilitator whose role included directions to administer the treatment. Teams that were part of the “Internally facilitated – no treatment” group included a facilitator whose role included general directions, such as “If

the group becomes stuck, help them work through the problem.” An optional role of Chair of the Board was available for teams that needed an additional member.

#### Assigning teams to experimental groups

To determine the mix of experimental groups that would be used during each session, I would first look at the number of individuals on each team. So, for example, if there were four teams signed up for a time slot; one with four members, two with five members, and one with six members, I could make several choices about assignment. First, the team with six members would necessarily include both a facilitator and the optional Chair role. I wanted to include one team from each of the four experimental groups during the exercise, so one of the teams with five people would include a facilitator and the other would include a Chair position with no facilitator. Finally, the team with only four members would have only the four required roles.

I used the list of positions in Table 3.5 to determine experimental group assignment.

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Insert Table 3.5 here

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I would match the order in which the teams had signed up to the above table to determine assignment to an experimental group. So, for example, if the team with six individuals had signed up first on the list, I would assign them to team number 3, since this was the first number that would allow six members. If the next team that signed up had four members, they would be assigned to team number 1. The two teams with five members would then be assigned team numbers 2 and 4. Team numbers for the next session during that day would begin at number 5. If more than twelve teams were scheduled for single day I would start again with team number 1.

Packets were assembled for each team that matched the specific role mix required. Each packet consisted of a folder for each team member. The packets contained general information about the exercise as well as specific instructions for the particular role that a member was to play. A full description of the folder's contents is available in this chapter and copies of the materials are in Appendix A.

### Technical Setup

The exercise was carried out as virtual teams working together in chatspace. AOL's Instant Messenger was chosen as the chatroom tool because it is widely available and can be used on both Macintosh and Windows platforms. Instant Messenger requires a "buddyname" and password for access to its chatrooms. For several reasons I decided to register and use my own buddynames for the exercise rather than allow the students to use their own. First, students might not have their own buddynames. Also, the exercise

was simpler for the students if I logged them in and set up the chatrooms before the students' arrival. Finally, and most importantly, students' security and anonymity was enhanced by using buddynames that I selected rather than their own. Table 3.6 shows typical buddynames, passwords, and roles for team number one.

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Insert Table 3.6 here

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#### Seat Setup

Each of the folders used by the students had their corresponding buddyname written on the front. Before the students arrived, I would select the folders needed and place them at the workstations throughout the room, one per workstation. One concern was that team members might try to communicate with one another verbally rather than in the chatroom. To limit this possibility, I was careful to ensure that no two members belonging to the same team were placed near one another. If possible, I would place the folders so that there was a vacant workstation between two individuals. When this was not possible due to the number of students, I would put students playing similar roles near one another. So for example, part of one row might have four Union Representatives seated next to one another. The remainder of the row might have several Finance Directors seated next to one another. There was always at least one empty workstation, a

pillar, or an aisle separating the two groups. Finally, I would place a consent form (with the appropriate buddynames written on it) on top of each closed folder at each workstation.

After placing the folders, I would go to each workstation and log in with the buddynames written on the folders. I would also open up the calculator tool on the computer and put it on each desktop for the students' use in making calculations related to the exercise.

### Chatroom Setup

After logging in each workstation, I would go to the front of the room and set up the chatroom. Instant Messenger limits the number of open chatrooms per user to three, so I would log into two computers at the front of the room using two of my own buddynames. I would then "invite" each of the teams to their respective chatrooms. If a team was designated as "Externally facilitated – Treatment", I would also log in with the appropriate facilitator buddynames (e.g., such as "univbfac2" for team 2's facilitator) on a separate notebook computer that was set up at the front podium. (So, for example, when team 2 would be working in their chatroom that I was facilitating they would see me only as "univbfac2".) I was only able to have one team in the "Externally facilitated – Treatment" group per session. After inviting all the buddynames to their appropriate chatrooms I would go to each computer and "accept" the invitation, which would open up the chatroom so they could use it. I would then send each of the chatrooms a message

that read, **“Please do not close this window. You will be using it to chat, negotiate, and reach a decision with your team members. Thank you.”**

Besides working together in chatrooms, during a portion of the exercise students were asked to respond directly to me, without making their responses known to the other members of their team. To allow them to do this, I would send each buddyname an instant message saying, **“Please do not close this window. You will be using it to respond to questions during the Reflection Period. Thank you.”**

At this point, each student’s screen would have a chatroom and an instant message open. Two of my computers would each have up to three chatrooms open plus an instant message window for each of the students in the chatrooms. My third computer would be logged in as the external facilitator for one of the teams.

#### Chalkboard Instructions

After setting up the computers, I would write instructions for the students on the chalkboard. At the left side of the chalkboard I would write down the team name and number of students per team. So, using the example of four teams I used earlier, Table 3.7 details what would be written down.

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Insert Table 3.7 here

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The following text was written on the chalkboard:

“Note: Please ONLY write on the scratch sheet in your folder.

This is an exercise in team decision-making.

**GOALS:**

1) Make your company as **PROFITABLE** as possible. (You have to save **MORE THAN \$260,000.**) Remember, Revenue – Expenses = Profit.

2) Achieve highest individual level goal possible.

3 = **HIGHEST** goal level,

1 = **MINIMUM** goal level <=Must achieve at least a level 1

\$500 prize to **MOST PROFITABLE** team; divided according to relative goal attainment. So, for a winning four person team this might happen:

Team member	Goal Level	Prize
1	3	\$250
2	1	\$86.67
3	1	\$86.67
4	1	\$86.67

3) Achieve **CONSENSUS!!**

**MATERIALS AND INSTRUCTIONS:**

**PLEASE READ and (IF YOU CONSENT) SIGN “Informed Consent”**

**Complete “Network Survey”**

**SKIM “Interpersonal Competencies”**

**BROWSE “Negotiation Round Instructions”**

**SKIM “Reflection Period Questions”**

**READ CAREFULLY**

**1 – Participant Briefing**

**2 – Your Role Instructions**

**Timetable**

**10 minutes Read materials**

**10 minutes Negotiate in chatroom (with your team)**

**10 minutes Answer Reflection Period Questions in Instant Message window (NO chatting during Reflections or you are disqualified from the contest)**

**10 minutes Negotiate in chatroom**

**10 minutes Answer Reflection Period Questions**

**10 minutes Negotiate in chatroom**

**10 minutes Answer Reflection Period Questions**

**10 minutes Negotiate in chatroom, complete Final Decision Sheet**

**10 minutes Answer Reflection Period Questions, print out dialogue for your homework.**

**Thanks**

Start and end times for each segment of the timetable were also written down.

It would take about an hour to set the room up for each session.

### Handling Participants

As the students would arrive, I would ask them for their team name. If there were several teams with the same number of members, I would ask them to pick a team number from those having that number of members. So, for the example given earlier, if the “Grunge” team came in first, I would ask them to pick either number 2 or 4. After they chose a number, I would tell them that that was their team number. Then I would ask for a volunteer from their team to be the “scribe” whose job it was to write down the team’s final decision. I would then hand that person a copy of the “Final Decision Sheet” (see Appendix A) with their team number circled. I would then tell the team that each could take a seat at one of the workstations that had a folder in front of them that ended in their team number. I would ask them not to close any windows on the computer, and not to open the folders yet. However, they could begin reading the informed consent form on top of their folder.

Inevitably, one or more students were missing from a team. When this happened, I would first remove the Chair of the Board folder from the team (if one existed), then, if

necessary, a facilitator. As mentioned earlier, 22 teams were disqualified from the research because they had fewer than four members.

After all teams were seated and had read through the informed consent forms I would read what was written on the chalkboard and ask if there were any questions. They could then begin the exercise. Every ten minutes, at the transition points in the exercise, I would ring a bell to get their attention and let them know that it was time to move on to the next segment.

If the start of the exercise was delayed because of technical problems or some other reason, I would adjust the schedule by taking a minute or two away from each Reflection Period rather than the time spent negotiating.

At the beginning of the last negotiation period students were told to write their final decisions down on the Final Decision Sheet. After they left the room I downloaded all chatroom dialogue and instant message responses to disk.

#### Overview of data collection

Data collection began on September 21, 2001 and was completed on October 29, 2001. Table 3.8 summarizes the number of teams in each treatment group that participated in the exercise on each date.



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Insert Table 3.8 here

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## DESCRIPTION OF THE RESEARCH MATERIALS

This section provides an item by item discussion of the materials distributed to the students for this research. Copies of the materials used are in Appendix A.

### Informed Consent for Use of Data

The informed consent form was placed on top of the folders at workstations for participants to read before the exercise. It has contact information on it in case the student's team would win the \$500 prize and a place for a signature. The appropriate buddyname was written on the form before the student received it.

### Network Survey

The network survey was stapled to the informed consent form. It requested information to be used in later research.

## Interpersonal Competencies Simulation

This sheet was stapled to “Negotiation Round Instructions” and “Reflection Period Questions”. Besides a blank sheet of white paper for students to take notes on, it was the first sheet that students saw when opening their folders. It describes the exercise in general terms as well as the prize.

### Negotiation Round Instructions

This sheet provided general instructions for the negotiation rounds.

### Reflection Period Questions

This sheet provided instructions for the Reflection Periods. Each of the four Reflection Periods was a ten-minute interval following a Negotiation Round. During this time individuals were asked to reflect on what had happened during the previous ten minutes and respond to questions in their Instant Message window to the researcher. Participants were asked to respond to three questions during each Reflection Period. Examples were given to illustrate the questions.

As Boje (2001: 77), illustrated, a text can be thought of as existing at the intersection of the precedent/anticipated dimension and the global/local dimension. Questions 1 and 2 are designed to surface the precedent/anticipated dimension by asking the participants to

illustrate incidents where they were either acting in response or in anticipation of another's actions. Question 3 was asked for future research.

1. If, during the dialogue, part of what you wrote was a response to someone else's actions, describe why you chose to respond in the way that you did.

2. If, during the dialogue, part of what you wrote was in anticipation of what you expected someone else's position to be, describe why you chose to write what you did.

3. Describe and rate how you felt just before and after key incidents in the dialogue.

Students were asked to respond to the questions by writing as much as possible during the Reflection Period. If they could not think of a response to one or more of the questions they were told that they could skip that question. At the end of the Reflection Period a bell was sounded and the team went on to the next negotiation period. During the last Reflection Period students were asked to tell the story of what happened during the negotiation period. This question was asked to unearth differing narratives of the experience.

## Participant Briefing

The Participant Briefing was the next piece of information that students saw in their packet. It consisted of two pages stapled together. The Participant Briefing provided general information about the exercise and, most importantly, a budget sheet for the company. This information was part of the “Acme Manufacturing” simulation purchased from EduSim ([www.edusim.net](http://www.edusim.net)), and is reprinted in the Appendix with their gracious permission.

## Role Profile Information Sheets

Each participant in the exercise had one role profile sheet in the folder corresponding to the role he or she was to play in the exercise. With the exception of the facilitators’ role profiles, this information was part of the “Acme Manufacturing” simulation purchased from EduSim ([www.edusim.net](http://www.edusim.net)), and is reprinted in the Appendix with their gracious permission.

The role profile provides information about each role that is not available to the other members of the team. The most important piece of information is the description of the goal levels. The Level 1 goals, in particular, place constraints on individual action, because the exercise requires that all participants achieve at least Level 1 goals. For example, all three directors have a level 1 goal of “Retain your own position”.

The surfacing of underlying reasoning is an important variable in this research. The models presented earlier propose that it either acts as a mediating variable between interventions to surface inquiry and performance or interacts with the interventions to affect team performance. In particular, surfacing underlying reasoning is considered to have occurred when statements like “I have to retain my own position”, are linked with the fact that this is a level 1 goal.

The Development Director, Finance Director, Personnel Director, Union Representative, and Chair of the Board only had access to their own goal levels. The facilitators had access to all goal levels of all team members to “level the playing field” between groups that were facilitated. (I, as both the researcher and external facilitator, had access to all goal levels. So it was possible that I would unknowingly use that information to direct the conversation in a way that would help the teams I was facilitating improve their performance. Providing this information to all facilitators at least reduced the possibility that my “insider information” would constitute an unfair advantage for the externally facilitated teams over those internally facilitated.)

#### Final Team Decision Sheet

This sheet was provided to a member of the team who volunteered to be the “scribe” before the team began the exercise. The sheet had places for the teams to indicate all possible allowable decisions made in order to bring the firm to profitability. Members

were asked to sign the sheets indicating that they agreed to the final decision made. The data from this sheet was used to calculate the overall firm profitability resulting from their decisions, which was the measure of team performance.

## TREATMENT OF DATA

The qualitative portion of this research used data from two sources.

- 1) The text of each team's conversation from their chatroom as they went about deciding how to make the company more profitable.
- 2) The text of each individual's responses to the Reflection Period questions that he or she wrote in the Instant Message window.

The quantitative portion of this research measured three constructs, which are discussed in more detail below.

- Model II Interventions to surface information. This was indicated by a treatment indicator variable as well as measured by counting interventions in the chatroom dialogue.
- Surfacing of information and underlying reasoning. This was measured by counting requirements of Level 1 or Level 2 goals (e.g., "I must retain my position") linked with the fact that this was a requirement of a particular goal level (e.g., "This is a Level 1 goal").

- Team performance. This was measured by taking the data from the Final Team Decision sheet, entering it into a spreadsheet, correcting any violations of Level 1 goals to the nearest possible value, and calculating the resulting company profit.

#### Interventions to surface information

This construct is composed of inquiries designed to surface information. The three basic categories of these inquiries, as discussed earlier, are those dealing with deletions, distortions, and generalizations. The variables used are the number of inquiries in each of these categories that exactly matched the form suggested in the treatment facilitator's profile sheets. However, it became clear during the early phases of data analysis that the internal treatment facilitators were not following the specific forms of inquiries suggested in their profile sheet. For example, upon hearing an advocacy (e.g., "I have to keep my job") rather than asking, "What leads you to see it that way?" the question "Why?" was commonly asked. The question "Why?" could be interpreted as a proxy for "What leads you to see it that way?" Therefore, in addition to counting the "exact" inquiries, a count was made of the "proxy" inquiries in the chatroom dialogue. The data were measured at the team level, so each team had six variables:

- Exact inquiries to surface deleted information
- Exact inquiries to surface generalized information
- Exact inquiries to surface distorted information
- Proxy inquiries to surface deleted information

- Proxy inquiries to surface generalized information
- Proxy inquiries to surface distorted information

There was only one case where the last variable, “Proxy inquiries to surface distorted information” was non-zero, so this variable was deleted.

### Surfacing of Information

This construct is composed of statements that combined a Level 1 or 2 goal requirement and the fact that this was a requirement of a particular goal level. So, for example, a statement like “One of my Level 1 goals is to retain my own position” was counted as one instance of a Level 1 surfacing. The data were measured at the team level, so each team had two variables:

1. Surfaced Level One goals
2. Surfaced Level Two goals

These levels were chosen because they were both easily counted (an important factor given the large amount of data gathered in the study) and important to the team members by virtue of the incentive to maximize personal goal attainment.



## Team Performance

The performance measure used was team profitability. The teams' final decisions about layoffs, salaries, and project budget were entered into a spreadsheet. The spreadsheet calculated the profit for the team. An example spreadsheet from one of the teams is shown in Figure 3.4.

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Insert Figure 3.4 here

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The column under "Flags" in the lower right corner of the spreadsheet was used to indicate violations of requirements of the exercise. In the above example, the Union Representative flag is set to a "1", indicating that a key constraint has been violated. The "Per unit exp." column at the top of the screen indicates the team decided to make the salary for the 100 employees \$18,000 each, which is a ten percent wage cut. A Level 1 goal for the Union Representative is 100 employees at less than a 9% salary cut (8.9% was generally used), so this is a violation of exercise requirements. When these salaries were reduced to 8.9% to meet the requirements, the profit for the company drops from \$44,000 to \$22,000. The \$22,000 was the profitability figure used as research data for this team.

The other flag that was set, “Managers and Directors must accept a greater percentage salary cut than employees”, is not a Level 1 constraint. It was noted in the spreadsheet for purposes not related to this dissertation.

### Reliability Issues

The variables operationalizing the constructs, “Interventions to surface information” and “Surfaced underlying reasoning” had their measures based on the judgment of the researcher. Six operationalizations of these variables were coded by the researcher:

- Surfaced Level One Goals
- Surfaced Level Two Goals
- Exact interventions for cases of Deletions
- Proxy interventions for cases of Deletions
- Exact interventions for cases of Generalizations
- Proxy interventions for cases of Generalizations

To establish statistical reliability of these measures an outside rater was used. Thirty one samples of conversation were randomly selected from each of the six operationalizations coded by the researcher. Altogether there were 186 samples of conversation. These samples were randomly ordered in a single spreadsheet before being given to the outside rater. The results for each operationalization follow.

Surfaced Level One Goals. 103 samples of conversation were coded by the researcher as belonging to this operationalization. Of the 31 samples evaluated, the researcher and outside rater had 94% agreement.

The outside rater evaluated the thirty one samples as shown in Table 3.9.

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Insert Table 3.9 here

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Surfaced Level Two Goals. 38 samples of conversation were coded by the researcher as belonging to this operationalization. Of the 31 samples evaluated, the researcher and outside rater had 100% agreement.

Exact interventions for cases of Deletions. 89 samples of conversation were coded by the researcher as belonging to this operationalization. Of the 31 samples evaluated, the researcher and outside rater had 77% agreement.

The outside rater evaluated the thirty one samples as shown in Table 3.10.

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Insert Table 3.10 here

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Proxy interventions for cases of Deletions. 349 samples of conversation were coded by the researcher as belonging to this operationalization. Of the 31 samples evaluated, the researcher and outside rater had 81% agreement.

The outside rater evaluated the thirty one samples as shown in Table 3.11.

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Insert Table 3.11 here

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Exact interventions for cases of Generalizations. 49 samples of conversation were coded by the researcher as belonging to this operationalization. Of the 31 samples evaluated, the researcher and outside rater had 90% agreement.

The outside rater evaluated the thirty one samples as shown in Table 3.12.

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Insert Table 3.12 here

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Proxy interventions for cases of Generalizations. 71 samples of conversation were coded by the researcher as belonging to this operationalization. Of the 31 samples evaluated, the researcher and outside rater had 61% agreement.

The outside rater evaluated the thirty one samples as shown in Table 3.13.

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Insert Table 3.13 here

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### Statistical Procedures

The next chapter will present the results of the statistical analysis done on the data. Two types of analysis were done to evaluate the hypotheses.

The first analysis checks for an effect of treatment on team profitability. One-tailed t-tests were used to check for significant differences between the means of the treatment and the non-treatment groups. One-tailed t-tests were also used to check for hypothesized significant differences between the means of the various experimental groups.

Mediating and moderating models potentially describe the relationship between the surfacing of information, the interventions used, and team profitability. Both types of models were tested using Baron and Kenny's (1986) recommendations for testing mediation and moderation effects.

All t-tests were conducted with the confidence level, alpha, at 0.05.

## CHAPTER 4 - RESULTS

As discussed in Chapter 1, this study examines the relationship between Model II interventions designed to surface information, the surfacing of information held by members of a team, and team performance. To review, 518 individuals from 123 teams participated in this research, of which 369 individuals in 77 teams constituted the population sample. This chapter provides a quantitative evaluation of the eight hypotheses presented in Chapter 3.

### DATA VERIFICATION

The data were first analyzed for the presence of outliers. Outliers may occur when some factor external to the controlled conditions of the experiment significantly affects the outcome of a very few cases. Since the aim of the statistical tests is to determine central tendencies, outliers may need to be removed if they would have an impact on overall results. To identify outliers, the outcome variable, profitability, in each experimental group was standardized. Three cases were identified as potential outliers, two in the External Facilitator – Treatment group and one in the Internal Facilitator – Treatment group. Table 4.1 summarizes information relevant to these cases.

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Insert Table 4.1 here

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The case from the Internal Facilitator – Treatment group was identified as an outlier and removed from the calculations for the first six hypotheses. The two cases in the External Facilitator – Treatment group were not removed since both were less than 2 sigma from the mean and because n was much smaller for this group.

### ANALYSIS OF HYPOTHESES

Hypotheses relating to predictions that one group will have significantly better performance than another are tested using t-tests. One-tailed rather than two-tailed t-tests are used. Two tailed tests are appropriate for null hypotheses that the differences between means are zero, while one tailed tests are appropriate for a null hypotheses that the mean of a specific group is not greater than the mean of another. The latter is the type of null hypotheses used in this research.

#### Hypothesis 1

The first hypothesis states that the teams treated with interventions to surface information will perform significantly better than those not treated ( $p < .05$ ). The summary of the results is found in Table 4.2. The mean profit for the treatment group is considerably higher than that of the no treatment group.

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Insert Table 4.2 here

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A one-tailed t-test was used to calculate the probability that the profitability of the treatment group was greater than that of the non-treatment group if the null hypothesis of no difference were true. The results are in Table 4.3.

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Insert Table 4.3 here

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The difference in means was significant. Based on the analysis of these data the null-hypothesis was rejected. The findings support the hypothesis that the intervention was effective in improving team performance.

#### Hypotheses 2a-2e

These hypotheses have to do with specific predictions about the relationships between experimental groups. An overview of the performance of the various groups is presented in Table 4.4.



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Insert Table 4.4 here

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Hypothesis 2a states that the “Externally facilitated – treatment” teams will have significantly higher profitability than that of the “Internally facilitated – treatment” teams.

A one-tailed t-test was used to calculate the probability that the profitability of the “Externally facilitated – treatment” was greater than that of the “Internally facilitated – treatment”. The results are in Table 4.5.

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Insert Table 4.5 here

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The difference in means was not significant. Based on the analysis of these data the null-hypothesis was not rejected. The findings do not support the hypothesis that treatment via external facilitation produces higher profitability than treatment via internal facilitation.

Hypothesis 2b states that the performance of “Externally facilitated – treatment” teams will be significantly greater than that of “Internally facilitated – no treatment” teams.

A one-tailed t-test was used to calculate the probability that the profitability of the “Externally facilitated – treatment” was greater than that of the “Internally facilitated – no treatment”. The results are in Table 4.6.

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Insert Table 4.6 here

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The difference in means was not significant at  $p < 0.05$ . At this level the findings do not support the hypothesis that treatment via external facilitation produces higher profitability than no treatment via internal facilitation. However, the results are very nearly significant at  $p < 0.10$ .

Hypothesis 2c states that the performance of “Externally facilitated – treatment” teams will be significantly better than that of “Control Group” teams.

A one-tailed t-test was used to calculate the probability that the profitability of the “Externally facilitated – treatment” was greater than that of the Control group. The results are in Table 4.7.

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Insert Table 4.7 here

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The difference in means was not significant at  $p < 0.05$ . At this level, the findings do not support the hypothesis that treatment with an external facilitator produces higher profitability than the no treatment in the Control group. However, the results are significant at  $p < 0.10$ .

Hypothesis 2d states that there will be a significant difference between the performance of “Internally facilitated – treatment” teams and that of “Internally facilitated – no treatment” teams.

A one-tailed t-test was used to calculate the probability that the profitability of the “Internally facilitated – treatment” was greater than that of the Internally facilitated – no treatment”. The results are in Table 4.8.

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Insert Table 4.8 here

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The difference in means was not significant at  $p < 0.05$ . At this level, the findings do not support the hypothesis that teams treated by an internal facilitator have higher profitability than teams with an internal facilitator that does not provide the treatment. However, the results are nearly significant at  $p < 0.01$ .

Hypothesis 2e states that there will be a significant difference between the performance of “Internally facilitated – treatment” teams and that of “Control Group” teams.

A one-tailed t-test was used to calculate the probability that the profitability of the “Internally facilitated – treatment” was greater than that of the Control group. The results are in Table 4.9.

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Insert Table 4.9 here

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The difference in means was not significant at  $p < 0.05$ . At this level, the findings do not support the hypothesis that the teams treated by an internal facilitator had significantly higher profitability than the teams in the control group. However, the results are significant at  $p < 0.10$ .

## Model testing hypotheses

Two alternative models were hypothesized to explain the relationship between the interventions and team performance. Data were standardized prior to regression.

**Mediating Model.** Hypothesis 3a says that the reason why the interventions lead to improved performance is that they lead to increased surfacing of information, and that this in turn leads to improved performance. That is, surfacing of information mediates the relationship between interventions to surface information and team performance. According to this model, treatment designed to facilitate the surfacing of information increase the frequency of surfacing which then leads to greater performance. The model appears in Figure 4.1.

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Insert Figure 4.1 here

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Testing this model follows the method of Baron and Kenny (1986). First, a regression is run to check that instances of interventions are significantly related to individual information surfaced. If this is true, another regression is run to check that individual information surfaced is related to team profitability. Finally, a regression is run to check that instances of interventions are related to the team profitability. If these regressions all

show an effect in the desired direction, then the effect of the independent variable on the dependent variable must be less in the third equation than in the second.

The model was first tested for the effect of "Surfaced Level One Goals" (a variable measuring individual information surfaced) on team profitability. For this portion of the analysis, following the reasoning given for Hypothesis 1, the "Internal Facilitator - Treatment" outlier was excluded from this analysis. The results of this regression are in Table 4.10.

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Insert Table 4.10 here

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The results support the validity of the link hypothesized in this model between Surfaced Information and Team Profitability.

This model was then tested using an indicator for the experimental treatment versus non-treatment as the variable indicating Model II Interventions were applied. In other words, if a team was in the treatment group "Instances of Interventions" was a "1", if not, it was a "zero". For this portion of the analysis, following the reasoning given for Hypothesis 1, the "Internal Facilitator - Treatment" outlier was excluded from this analysis. The results

of the regression using "Surfaced Level One Goals" as the dependent variable for individual information surfaced appear in Table 4.11.

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Insert Table 4.11 here

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The hypothesized link in this model between Model II interventions and Surfaced Information is not valid for  $p < 0.05$ , though it is valid for  $p < 0.10$ . Therefore the overall model is not supported at  $p < 0.05$ .

When this regression was run using "Surfaced Level Two Goals" for individual information surfaced, T was significant at 0.7458, so the use of this variable was not pursued.

In summary, the link between interventions and surfacing information fails at  $p < 0.05$ . The overall model suggesting that treatment with Model II interventions increases the amount of surfaced information, which then leads to improved performance is not valid. There is no reason to further test the model by checking for the effect of the experimental group on team profitability.

Moderating Model. The next model hypothesizes that the surfacing of information and interventions to surface information interact to improve team performance. To review, the model appearing in Figure 4.2 is being tested.

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Insert Figure 4.2 here

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This model was tested using an indicator for the experimental treatment versus non-treatment as the variable indicating that Model II Interventions were applied. For this portion of the analysis, following the reasoning given for Hypothesis 1, the "Internal Facilitator - Treatment" outlier was excluded from this analysis. Table 4.12 contains the results of the regression using "Surfaced Level One Goals" for individual information surfaced and Team Profitability as the dependent variable.

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Insert Table 4.12 here

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Since the only significant effect is due to the surfacing of Level One goals, this operationalization of the model is not supported.



An additional regression was run using "Surfaced Level Two Goals" for individual information surfaced and its interaction effect with the treatment indicator. No variables were significant for this regression, therefore this operationalization of the model is not supported.

### Additional Analyses

However, the use of experimental treatment group indicators does not capture the full complexity of the relationship between interventions, surfaced information, and team profitability. There was not only a great deal of variation in the number of interventions that were applied to the teams in the treatment group, there were also instances where individuals in both the treatment and non-treatment group spontaneously generated inquiries which might serve to assist in the surfacing of information. As previously described in the section of Chapter 3 entitled "Treatment of Data", these instances are termed "proxy" interventions (in contrast to "exact" interventions, which follow the form suggested by the inquiry guide). This raises the possibility of examining the relationships between these variables at a more micro level, considering the effect of quantity and type of interventions on the surfacing of information and team performance. One advantage of such an analysis is that it takes into account potential effects related to the quantity of interventions. This would be the case, if, for example, a larger number of interventions results in higher performance than a smaller number of interventions. This type of analysis also reveals potential effects due to the type of interventions, such as exact

versus proxy interventions to deal with deletions, generalizations, etc. It does not, however, make any distinction between treatment and non-treatment groups.

Both a mediating and moderating model were tested for this analysis, using counts of the various intervention types as the measure for "instances of interventions". During these analyses, all 77 cases were used for testing the models.

**Mediating Model Additional Analysis.** This analysis further tests hypothesis 3a, which says that the reason why the interventions lead to improved performance is that they lead to increased surfacing of information, and that this, in turn, leads to improved performance. That is, surfacing of information mediates the relationship between interventions to surface information and team performance. According to this model, questions designed to facilitate the surfacing of information increase the frequency of surfacing which then leads to greater performance. To review, there were six kinds of interventions that were hypothesized to improve team profitability. They were exact and proxy interventions that were designed to help in situations where there were deletions, distortions, and generalizations. As was discussed earlier in the section regarding the treatment of data, the proxy intervention to assist in the case of distortions variable was deleted and is not a part of this analysis. In addition to checking for significant relationships using each of the five remaining variables, the analysis was also done using summations of these variables, specifically "All Exact interventions", "All Proxy interventions", "All interventions to deal with deletions", and "All interventions to deal

with generalizations”. The model using instances of interventions (rather than Model II treatment) appears in Figure 4.3.

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Insert Figure 4.3 here

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The previous analysis has shown that there is a significant relationship between “Surfaced Level One Goals” (a measure of individual information surfaced) and team profitability. So the next step is to determine whether there are any significant relationships between variables operationalizing the “Instances of Interventions” and “Surfaced Level One Goals”.

*Proxy interventions to assist in cases of Deletions.* The results of this regression with “Surfaced Level One Goals” as the dependent variable appear in Table 4.13.

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Insert Table 4.13 here

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The model is not supported when using this particular operationalization of the intervention variable.

*Proxy interventions to assist in cases of Generalizations.* Table 4.14 contains the results of this regression with “Surfaced Level One Goals” as the dependent variable.

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Insert Table 4.14 here

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The model is not supported when using this particular operationalization of the intervention variable.

*Exact interventions to assist in cases of Distortions.* The results of this regression with “Surfaced Level One Goals” as the dependent variable appear in Table 4.15.

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Insert Table 4.15 here

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The model is not supported when using this particular operationalization of the intervention variable.

*Exact interventions to assist in cases of Deletions.* Table 4.16 contains the results of this regression with “Surfaced Level One Goals” as the dependent variable.

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Insert Table 4.16 here

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The model is not supported when using this particular operationalization of the intervention variable.

*Exact interventions to assist in cases of Generalizations.* The results of this regression with “Surfaced Level One Goals” as the dependent variable are contained in Table 4.17.

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Insert Table 4.17 here

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The model is not supported when using this particular operationalization of the intervention variable.

*All Exact interventions.* Table 4.18 contains the results of this regression with “Surfaced Level One Goals” as the dependent variable.

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Insert Table 4.18 here

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The model is not supported when using this particular operationalization of the intervention.

*All Proxy interventions.* The results of this regression with “Surfaced Level One Goals” as the dependent variable appear in Table 4.19.

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Insert Table 4.19 here

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The model is not supported when using this particular operationalization of the intervention variable.

*All interventions to assist in cases of Generalizations.* Table 4.20 contains the results of this regression with “Surfaced Level One Goals” as the dependent variable.

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Insert Table 4.20 here

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The model is not supported when using this particular operationalization of the intervention variable.

*All interventions to assist in cases of Deletions.* Table 4.21 contains the results of this regression with “Surfaced Level One Goals” as the dependent variable.

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Insert Table 4.21 here

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The model is not supported when using this particular operationalization of the intervention.

*Summary of mediating model additional analyses results.* None of the specific interventions to surface information were significantly related to the “Surfacing Level One Goals” variable. Thus there is no reason to further pursue the mediating model using instances of interventions.

Moderating model additional analysis. This analysis follows the form of the previous analysis of a moderating model. As in that model, it is hypothesized that the surfacing of information and interventions to surface information interact to improve team performance. The difference is that rather than using a treatment indicator for Model II interventions, this analysis uses counts of the instances of particular types of interventions. To check the validity of this model, first all interactions are checked by means of regression analysis for a significant effect on the outcome variable. Those that do have a significant effect are then checked for their significance in a regression that includes all other independent variables. To review, six kinds of interventions are hypothesized to improve team profitability. They are exact and proxy interventions that are designed to help in situations where there are deletions, distortions, and generalizations. As in the mediating model, the variable for “Proxy interventions to deal with distortions” has been deleted from the analysis.

To review, the model being tested appears in Figure 4.4.

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Insert Figure 4.4 here

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The results of checking for the significance of interaction effects on team profitability, follow.



*Surfaced level 2 goals interacting with exact interventions for cases of Generalization.*

Table 4.22 contains the results of the regression.

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Insert Table 4.22 here

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The model is not supported when using this particular operationalization of the variables.

*Surfaced level 2 goals interacting with exact interventions for cases of Deletions.* The results of the regression appear in Table 4.23.

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Insert Table 4.23 here

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The model is not supported when using this particular operationalization of the variables.

*Surfaced level 2 goals interacting with exact interventions for cases of Distortions.* Table 4.24 contains the results of the regression.

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Insert Table 4.24 here

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The model is not supported when using this particular operationalization of the variables.

*Surfaced level 2 goals interacting with proxy interventions for cases of Generalization.*

The results of the regression appear in Table 4.25.

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Insert Table 4.25 here

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The model is not supported when using this particular operationalization of the variables.

*Surfaced level 2 goals interacting with proxy interventions for cases of Deletions.* Table

4.26 contains the results of the regression.

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Insert Table 4.26 here

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The model is not supported when using this particular operationalization of the variables.

*Surfaced level 2 goals interacting with all proxy interventions.* Table 4.27 contains the results of the regression.

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Insert Table 4.27 here

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The model is not supported when using this particular operationalization of the variables.

*Surfaced level 2 goals interacting with all exact interventions.* The results of the regression appear in Table 4.28.

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Insert Table 4.28 here

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The model is not supported when using this particular operationalization of the variables.

*Surfaced level 2 goals interacting with all interventions for cases of Deletions.* Table 4.29 contains the results of the regression.

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Insert Table 4.29 here

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The model is not supported when using this particular operationalization of the variables.

*Surfaced level 2 goals interacting with all interventions for cases of Generalizations.*

The results of the regression appear in Table 4.30.

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Insert Table 4.30 here

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The model is not supported when using this particular operationalization of the variables.

*Surfaced level 1 goals interacting with exact interventions for cases of Generalization.*

Table 4.31 contains the results of the regression.

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Insert Table 4.31 here

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The model is not supported when using this particular operationalization of the variables. R Square is 0.25296.

*Surfaced level 1 goals interacting with exact interventions for cases of Deletions.* The results of the regression appear in Table 4.32. The dependent variable is team profitability.

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Insert Table 4.32 here

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This model is very nearly supported using this particular operationalization of the variables. (The coder who did reliability checks coded several items differently than the researcher. When just one instance of an intervention is coded as an “Exact intervention for cases of deletions as she suggested the significance of the interaction term becomes 0.0499.) R square for this analysis is 0.27046.

*Surfaced level 1 goals interacting with exact interventions for cases of Distortions.* Table 4.33 contains the results of the regression.

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Insert Table 4.33 here

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The model is not supported when using this particular operationalization of the variables.  
R Square is 0.23277.

*Surfaced level 1 goals interacting with proxy interventions for cases of Generalization.*  
The results of the regression appear in Table 4.34.

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Insert Table 4.34 here

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The model is not supported when using this particular operationalization of the variables.  
R Square is 0.23604.

*Surfaced level 1 goals interacting with proxy interventions for cases of Deletions.* Table  
4.35 contains the results of the regression.

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Insert Table 4.35 here

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The model is not supported when using this particular operationalization of the variables.  
R Square is 0.26170.

*Surfaced level 1 goals interacting with all proxy interventions.* The results of the regression are contained in Table 4.36.

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Insert Table 4.36 here

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The model is not supported when using this particular operationalization of the variables.

*Surfaced level 1 goals interacting with all exact interventions.* Table 4.37 contains the results of the regression.

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Insert Table 4.37 here

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The model is not supported when using this particular operationalization of the variables.  
R Square is 0.26742.

*Surfaced level 1 goals interacting with all interventions for cases of Deletions.* The results of the regression appear in Table 4.38.

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Insert Table 4.38 here

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The model is not supported when using this particular operationalization of the variables.  
R Square is 0.28025

*Surfaced level 1 goals interacting with all interventions for cases of Generalizations.*  
Table 4.39 contains the results of the regression.

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Insert Table 4.39 here

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The model is not supported when using this particular operationalization of the variables.  
R Square is 0.23415



*Summary of the moderating model additional analyses.* When all cases are considered, Surfaced Level 1 Goals is significantly related to team Profitability. At  $p \leq 0.5$ , the interaction of Surfaced Level One Goals with Exact Interventions for Deletions are significantly related to profitability.

### Summary of Statistical Results

The first portion of this chapter investigated the eight hypotheses of this study. The first six considered the differences in performance between the various experimental groups. The last two considered two models that were hypothesized to describe the relationship between interventions to help teams surface information, the information that was surfaced during the exercise, and team profitability.

The analysis indicated significant differences in several areas. First, significantly ( $p < 0.05$ ) better performance was indicated for the teams that underwent treatment over those that did not. Also four out of the five hypotheses testing for differences between treatment and non-treatment groups were significant or nearly so at  $p < 0.10$ .

While the mediating model is not supported at  $p < 0.05$ , these results do not necessarily disprove the usefulness of the mediating model, given limitations of the sample (freshmen), the nature of the mediation (naked inquiries), the setting (virtual teams) and the task (a simulation). This model should be tested further in the future.

In addition, results indicate that surfacing information leads to better performance. Also the moderating model indicates that when information is surfaced the interventions are effective in improving team performance, since there was support for a regression model that hypothesized that the interventions interacted with the surfacing of information to produce improved team profitability. One explanation for the validity of the moderating model is that underlying values of team members have an effect on their inclination to surface information. This is consistent with Argyris contention that governing values are an important factor in organizational learning. It is interesting that there is a significant interaction effect of exact inquiries to handle instances of deletion with Surfaced Level One Goals. The fact that a positive result was obtained with these, rather than other forms of interventions, may have to do with the nature of the exercise. Surfacing deleted information may be more important to the success of the exercise than dealing with distortions or generalizations.

While the moderating model was supported when interventions were operationalized as instances of exact deletions, the theory that interventions lead to an increase in the amount of information surfaced, which then leads to performance improvement was not supported. There was no relationship in any of the analyses between treatment and surfacing information.

So the question of what leads to greater surfacing arises. If the amount of surfaced information can be increased, interventions can be useful in improving performance. Potential answers to this question, plus additional models, which might explain the processes occurring in the subject teams, are addressed from an intertextual perspective in the next chapter. The next chapter also provides a qualitative intertextual analysis of dialogues at either end of the performance spectrum.

## CHAPTER 5 - INTERTEXTUAL THEORY AND ANALYSIS

### OVERVIEW

This chapter first summarizes the extant literature on intertextuality. An understanding of intertextuality's underlying theory, specialized vocabulary, history, and perspective provides a background for making sense of the methods and analysis. A qualitative examination of dialogues at either end of the range of team profitability then brings to light some potential further statistical analyses of the data, which are pursued.

### INTERTEXTUALITY LITERATURE

Organization studies have benefited greatly by borrowings from other fields (Zald, 1996). In particular, the linguistic/literary turn has opened up new perspectives on organizations through, for example, postmodern narrative analysis (Boje, 1995), deconstruction (Kilduff, 1993), and feminist theory (Martin, 1990).

The concept of intertextuality, however, has received comparatively little attention in organization studies. Intertextuality provides insight into narrative processes by positing a polyphonic conversation between writers and readers of text (Boje, 2001: 13). It considers text to be a "mosaic of quotations" (Kristeva, 1980), for the most part untraceable to their "original authors". The text is subject to a multiplicity of interpretations by the reader since meaning is not fixed, but refers back to previous

usages, contexts, and connotations. Intertextual analysis goes radically beyond traditional concepts of individual action by challenging authorship, underscoring the polyphony of texts gathered, interpreted, selected, combined, and redistributed, only to be gathered again as they are woven into the fabric of dialogue.

Though it has been misinterpreted as such, intertextuality considers more than traces of influence, sources, or citations. As Barthes (1977: 160) describes it, “The intertextual in which every text is held, it itself being the text-between of text: to try to find the ‘sources’, the ‘influences’ of a work, is to fall in with the myth of filiation; the citations which go to make up a text are anonymous, untraceable, and yet *already read*: they are quotations without inverted commas.” Intertextuality addresses the dynamic textual system within which a work is historically and socially situated (Kristeva, 1980: 36-37). Intertextuality considers any particular text to be comprised of snippets and borrowings from other texts, each with its own particular ideological stance and multiplicity of meanings. Within a text, both the relationships between the author / reader, subject / addressee, and the relationships between the inside / outside, present / past come together to create meanings that are unique to any particular reading or reader.

This section describes the history and key concepts of intertextuality and then relates it to the dialogue occurring as part of this research.

## Roots of intertextuality

Intertextuality has its roots in semiotics, the study of signs. A sign is "a vehicle conveying into the mind something from without." (Peirce, 1960: I, 171). Anything which gives rise to meaning can be a sign, it "need not be a word; it can be a thought, an action, or anything which has an 'interpretant' - which, in other words, can give rise to further signs. Thus a cloud is a sign because it means 'rain'" (Passmore, 1966: 141). A "text" is composed of signs (Lotman, 1970) woven together to form the fabric of meaning. Intertextual analyses, though usually performed on written or spoken works, can thus be applied to any form of text, including advertisements, television programs, and art forms such as music and painting. Based on the perspective of organizations as "texts" (Kets De Vries & Miller, 1987; Thachankary, 1992), intertextual analysis has been used in research on project teams (Hansen, 1995), on organizational decision making (O'Connor, 1997), and on the process by which researchers in organization studies textually construct opportunities for making contributions to the field (Locke & Golden-Biddle, 1997).

## The sign and Saussure

To adequately address the topic of intertextuality, one must begin with a theory of the sign. Two of the major contributors to semiotics are Ferdinand de Saussure and Charles Sanders Peirce. Each, fairly independently, conceived of a theory of signs. Saussure's work, however, had the greatest impact on ideas about intertextuality.

Saussure conceived of the sign as being composed of two parts, the signified and the signifier. The signified is the concept or idea within one's mind. The signifier is the "sound-image", and is, as Saussure relates it to the spoken word, "not the material sound, a purely physical thing, but the psychological imprint of the sound, the impression that it makes in our senses" (Saussure, 1969: 66-67). The two parts of the sign are an indivisible psychological entity, like the two sides of a piece of paper. "One cannot cut the front without cutting the back at the same time" (Saussure, 1969: 113). Saussure's conception of the sign is purely mentalistic; that is, it excludes reference to any "real" objects. Signs refer only to other signs, like a dictionary whose definitions continually refer to other definitions, ad infinitum. This perspective places emphasis on the primacy of language. As Saussure (1969: 111-112) wrote, "Without language, thought is a vague, uncharted nebula. There are no pre-existing ideas, and nothing is distinct before the appearance of language". Saussure, being a structuralist, fixed the signification of language on systemic usages determined by convention, that which is accepted by society. "[E]very means of expression used in society is based, in principle, on collective behavior or -- what amounts to the same thing -- on convention" (Saussure, 1969: 68). Beyond convention, there is no particular reason why, for example, one should use the English word "tree" rather than the French "arbre" to describe a particular type of woody vegetation. Saussure's stress on convention emphasized the denotative aspects of language (a structuralist stance) rather than the connotative, the realms of meaning which are not part of the "definition", but are implied or brought to mind by a particular sign (a poststructuralist stance).

While signs, according to Saussure, do not refer to actual objects by virtue of their mentalistic nature, they are "differential". That is to say, it is the distinction between signs that provides meaning, since, but for convention, signs are arbitrary and have no meaning except in relation to other signs. As Saussure writes, "concepts... are defined not positively, in terms of their content, but negatively by contrast with other items in the same system. What characterizes each most exactly is being whatever the others are not" (Saussure, 1969: 117). One example that Saussure used to illustrate this is the case of letters. He writes, "the values of the letter are purely negative and differential" - in other words the thing of importance is that we can distinguish one letter from another (Saussure, 1969: 119-120). It is important to note that differential signs hold more than one relationship, indeed, they have a large number of relationships, or ways that they can be distinguished from other signs. In the simple case of letters, for example, one can distinguish consonants from vowels, letters adjacent alphabetically from those not, etc. For the author or speaker, it is this difference in signs which sets one to picking and choosing ideas, words, and concepts from the available corpus. In order to communicate, these choices are limited by conventional usage (e.g., the random series of letters "yfivfksondok" conveys no information). However, within the realm of conventional usage individuals have great freedom to choose and combine their words to communicate gradations of explicit and implicit meaning. Further, each sign that is chosen for use within a particular text is also accompanied by a host of relationships and connotations associated with a particular sign, the "also-signified". Thus to say, "it was a black night",



does not only comment on the level of available light, but in western culture also implies death, evil and mystery, along with innumerable other signs. The relationships called to mind by a particular text coalesce in the mind of the observer (Allen, 2000: 12). While black is associated with death in western culture and, to a western reader, is implied by the sentence, this connotation would not occur in some eastern cultures where white is the color of death. A text, therefore, becomes a place where multiple meanings converge within the mind of the observer, with the meanings based on all the texts the observer has encountered during his or her lifetime. This effectively undermines the stability of signification that could only occur with a complete homogeneity of experiences and culture.

While the importance of the reader / observer increases as he or she creates meaning out of a text, the importance of the author / actor decreases. The author / actor is seen as working within a sign-system that pre-exists. Consequently, he or she is not creating something new, but merely choosing and combining texts already in existence. This is the essence of intertextuality, which Barthes elucidated in his famous essay, "The Death of the Author" when he wrote (1977: 147-147):

We know now that a text is not a line of words releasing a single 'theological' meaning (the 'message' of the Author-God) but a multidimensional space in which a variety of writings, none of them original, blend and clash. The text is a tissue of quotations drawn from the innumerable centres of culture ... the writer can only imitate a gesture that is always anterior, never original. His only power is to mix writings, to counter the ones with the others, in such a way as never to rest on any one

of them. Did he wish to express himself, he ought at least to know that the inner 'thing' he thinks to 'translate' is only a ready-formed dictionary, its words only explainable through other words, and so on indefinitely.

Intertextuality considers the ways that many textual voices are woven together, sometimes clashing with one another, sometimes supporting one another, to form the fabric of dialogue and discourse. To appreciate the many facets of intertextuality, it is helpful to look more deeply at the works of its three major contributors; Mikhail Bakhtin, Julia Kristeva, and Roland Barthes.

### Bakhtin's Contributions

Bakhtin's major contribution to intertextuality can be found in the concepts of dialogism (double-voicedness), heteroglossia (differentiated speech), and carnival (a spectacle without a stage). His work emphasizes the conception of linguistic production as formed through the process of social interaction, that language is borrowed and transmuted as individuals, organizations, and societies exchange and respond to meanings. Considering this emphasis, it is ironic that there is some question about the authorship of some early works attributed to Bakhtin. In the early part of the twentieth century, Bakhtin interacted closely with Pavel Medvedev and Valentin Volosinov. Many scholars believe that works signed by these colleagues of his were, in fact, written largely by Bakhtin himself (Morris, 1994). To give due reference, works quoted here whose source is in question will be cited as "Volosinov/Bakhtin" or "Medvedev/Bakhtin".

Bakhtin built on Saussure's conception of the sign, but Volosinov/Bakhtin took issue with Saussurean linguistics because its abstract, objectivist approach did not recognize the importance of social interaction. As Volosinov/Bakhtin wrote (Volosinov, 1994b: 52):

"Signs emerge, after all, only in the process of interaction between one individual consciousness and another. And the individual consciousness itself is filled with signs. Consciousness becomes consciousness only once it has been filled with ideological (semiotic) content, consequently, only in the process of social interaction...

Signs can arise only on interindividual territory. It is territory that cannot be called 'natural' in the direct sense of the word: signs do not arise between any two members of the species *Homo sapiens*. It is essential that the two individuals be organized socially, that they compose a group (a social unit); only then can the medium of signs take shape between them."

### Dialogism

While Saussure eyed convention as the means by which systems of signs are granted structure, Volosinov/Bakhtin expressed the idea that each sign is unique, formed, by "the social organization of the participants involved and also by the immediate conditions of their interaction" (Volosinov, 1994b: 55). These conditions include the past and possible future interactions. As a conversation occurs, utterances are made both in response to what has been said previously (in that particular conversation and all conversations that

have impinged upon the consciousness of the speaker) and in anticipation of what might be said in the future. As Bakhtin (1988: 280) described it:

"The word in living conversation is directly, blatantly, oriented toward a future answer-word: it provokes an answer, anticipates it and structures itself in the answer's direction. Forming itself in an atmosphere of the already spoken, the word is at the same time determined by that which has not yet been said but which is needed and in fact anticipated by the answering word. Such is the situation in any living dialogue."

Language is, to use Bakhtin's term, "dialogic", or double-voiced, as it refers, Janus-like, to both past and future, speaker and respondent. Without these contextual relationships, giving reference to what has been and will be said, there is no meaning. Moreover, any meaning that does exist is unique, based on the context of the moment. The "situation enters into the utterance as an essential constitutive part of the structure of its import" (Volosinov, 1994a: 164). Volosinov/Bakhtin thus strikes at the heart of any objectivist notion of meaning, divorced from interaction. "Any true understanding is dialogic in nature. ...There is no reason for saying that meaning belongs to a word as such. In essence, meaning belongs to a word in its position between speakers, that is, meaning is realized only in the process of active, responsive understanding." (Volosinov, 1994b: 35). Thus, according to Bakhtin, the meaning shared between individuals in an interaction goes far beyond the mere exchange of dictionary definitions. Volosinov/Bakhtin illustrates this concept by proposing a thought-experiment (Volosinov, 1994a: 162-163). Suppose two people were sitting silently in a room. One said, "Well". The other

remained silent. As outsiders, the one word "Well" is incomprehensible. There is no meaning in it. Even if we are told that the statement was made with an intonation of "indignation and reproach moderated by a certain amount of humor", we still cannot make sense of the utterance. However, if we are given the context, that it is the first day of May, that both participants are sick and tired of winter, and that the speaker just looked out the window and saw that it was snowing, we can make sense of the utterance.

An utterance, therefore, can be said to have a certain tacit dimension. "Articulated words are impregnated with assumed and unarticulated qualities. What are called the 'understanding' and 'evaluation' of an utterance (agreement or disagreement) always encompass the extraverbal pragmatic situation together with the verbal discourse proper." (Volosinov, 1994a: 168). Past utterances also contribute to meaning. Any given utterance "cannot fail to brush up against thousands of living dialogic threads, woven by socio-ideological consciousness around the given object of an utterance; it cannot fail to become an active participant in social dialogue" (Bakhtin, 1988: 276). Not only is Bakhtin's conception thus inherently intertextual, but it also provides a perspective on meaning as inseparably carried within a discourse, comprised of both context and history. "When a member of a speaking collective comes upon a word, it is not as a neutral word of language, not as a word free from the aspirations and evaluations of others, uninhabited by others' voices. No, he receives the word from another's voice and filled with that other voice. The word enters his context from another context, permeated with

the interpretations of others. His own thought finds the word already inhabited” (Bakhtin, 1984: 201).

### Dimensions of Intertextuality

Kristeva expanded on Bakhtin’s ideas by envisioning two dimensions of intertextuality (Kristeva, 1986: 36). In the horizontal dimension, the word within a text is located in the social space between the subject and the addressee. The vertical dimension relates the word to the historical space of the existing and anticipated body of “outside” texts. In this textual space “horizontal axis (subject-addressee) and vertical axis (text-context) coincide, bringing to light an important fact: each word (text) is an intersection of word (texts) where at least one other word (text) can be read.” (Kristeva, 1986: 37). From this light, text can be seen as intertextual rather than merely intersubjective, and what might be considered a boundary between “inside” and “outside” texts is blurred. Boje (2001: 77) provides the two by two array of questions in Table 5.1 for investigating these dimensions in an intertextual analysis.

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Insert Table 5.1 here

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## Denial of Author-ity

From Bakhtin's notion of the word being 'half someone else's' (Bakhtin, 1988: 293), Kristeva and Barthes went one step further, to a denial of authorship. As mentioned earlier, Barthes proclaimed the 'death of the author' (Barthes, 1977: 147). He viewed the author as one who sets in motion an infinite number of potential meanings compiled from various sources, rather than one who is the "creator" or "owner" of a particular work. Kristeva, too, considered the issue of authorship to be problematic, speaking of writing as a process of putting together texts from several pre-existing sources to create a "permutation of texts, an intertextuality in the space of a given text" (Kristeva, 1980: 36). The author does not even serve as the ultimate interpreter of his or her own writing, since the meaning of the writing is drawn from the larger system of language, independent of the author. From this perspective, "the literary work is viewed not as the container of meaning but as a space in which a potentially vast number of relations coalesce. A site of words and sentences shadowed by multiple potentialities of meaning, the literary work can now only be understood in a comparative way, the reader moving outwards from the work's apparent structure into the relations it possesses with other works and other linguistic structures" (Allen, 2000: 12).

## Heteroglossia

As the world does not speak with a single voice, so the traces of previous discourse residing in utterances are not unitary, that is, they do not express a single perspective.

Bakhtin uses the word "heteroglossia" to describe the inevitable clash between various discourses that may exist within a single utterance, or even a single word. As Bakhtin describes it, language continually enacts a struggle between forces for a unitary, monologic understanding and forces for an unfinalizable, multilogical understanding. He writes (Bakhtin, 1994c: 75): "Every concrete utterance of a speaking subject serves as a point where centrifugal as well as centripetal forces are brought to bear. The process of centralization and decentralization, of unification and disunification, intersect in the utterance..." Authoritarian voices seek to impose a unitary, monologic understanding which voices of dissent, discord, and carnival continually erode. For an example of this, consider the term "business process reengineering". From a managerial perspective, business process reengineering was considered beneficial, and many organizations in the 1990's engaged in reengineering initiatives. However, from the employee's perspective, the term was capable of inducing considerable fear (Carson et al., 2000). The authoritarian voices of management proclaimed a single, positive vision of business process reengineering, which was undermined by employee understandings. Such has been the fate of many management fads (e.g., TQM, Quality Circles, empowerment, Six Sigma) whose names eventually become loaded with so many traces of dissenting meaning that they may become no longer useful.



## Multiplicity of meaning

Later voices built on Bakhtin's early ideas on intertextuality and the multiplicity of meaning inherent in language. Kristeva, emphasizing these multiple meanings, used the term 'signifiante' to refer to that which, as Roudiez put it, "enables a text to signify what representative and communicative speech does not say" (Kristeva, 1980: 18). As language is written or spoken, the author attempts to fix in words (a signifying system) the original meaning of the subject. However, because there are an infinite multiplicity of meanings available (language is polysemous), the original meaning cannot be captured, and the subject is "lost". When another experiences what has been fixed in a signifying system, there is an explosion of potential meanings, some of which are captured to be later reduced and fixed in a later signification. The 'signifiante', which is the full range of potential meaning, cannot be captured in a signifying system.

Kristeva considers a text to be continually in a state of "production", that its meaning is always in a process of becoming. From this perspective, "ideas are not presented as finished, consumable products, but are presented in such a way as to encourage readers themselves to step into the production of meaning" (Allen, 2000: 34). However, not all texts are equal in their ability to engender meaning. Kristeva (1984: 87) differentiates between the "phenotext" which "displays definable structure and appears to present the voice of a singular, unified subject (Kristeva, 1984: 86), and the "genotext" which unleashes that which is pre-logical and not able to be communicated. This distinction is echoed in Barthes' (1974: 3-11) description of "lisible" (readerly) and "scriptible"

(writerly) texts. Lisible texts assume the stance of an underlying, singular, authoritarian voice, which leads the reader toward a monologic understanding, to be passively absorbed by the reader. Scriptible texts, on the other hand, encourage the reader to take part in the creation of multiple meanings. Scientific and legal texts, for example, tend toward the phenotextual and lisible, while artistic expression tends toward the genotextual and scriptible.

Lisible texts act to constrain the meaning read into them using "anchors". As he spoke about it in reference to an advertising image, Barthes wrote; "the text *directs* the reader through the signifieds of the image...remote-control[ing] him towards a meaning chosen in advance. These actions are "intended to fix the floating chain of signifieds in such a way as to counter the terror of uncertain signs" (Barthes, 1977: 38-41). Though Barthes originally constructed this concept in the context of image-text combinations, it can also be related to ordinary conversation. For a conversation, attributional interpretations of other's actions can be considered a result of culturally embedded (textually widespread) preferred readings when there is a widely shared tendency to interpret codes of action according to a particular meaning. For example, "He is bullying me" is an interpretation of an action or set of actions with a set of verbal or action codes that signify bullying to the perceiver. The intentions of the presumed bully are unknown. If there is a general agreement among readers of a transcript of a so-called "bullying" incident that it was bullying, the preferred reading is one of bullying and there is an apparent anchorage for bullying in the expressed set of elements.

## Carnival and Heteroglossia

Bakhtin, the early descriptor of Carnival in its literary sense, traced its sources from ancient Greek and Roman forms of satire and parody (Bakhtin, 1994a: 189). His work "Rabelais and His World" described several aspects of carnival. As a spectacle in which people live and participate, "[i]t does not acknowledge any distinction between actors and spectators" (Bakhtin, 1994a: 198). It also displays a "grotesque realism", (Bakhtin, 1994a: 205) of exaggerated form and an "inside out" world (Bakhtin, 1994a: 200), where hierarchical rank does not exist and official discourse is parodied and challenged.

Carnival is essentially heteroglossic in nature, providing a centripetal force through dissenting voices which pull against the centrifugal force of the authoritarian voice which seeks to project a unitary, monologic view. It acts as a social and political protest challenging the dogma of official law (Kristeva, 1986: 36) and transgresses that law by its questioning (Lechte, 1990: 108). The carnival experience, throughout its development, "opposed to all that was ready-made and completed, to all pretence at immutability, sought a dynamic expression; it demanded ever changing, playful, undefined forms. All the symbols of the carnival idiom are filled with this pathos of change and renewal, with the sense of the gay relativity of prevailing truths and authorities." (Bakhtin, 1994a: 200). It "celebrated temporary liberation from the prevailing truth and from the established order; it marked the suspension of all hierarchical rank, privileges, norms, and prohibitions. Carnival was the true feast of time, the feast of becoming, change, and

renewal. It was hostile to all that was immortalized and completed" (Bakhtin, 1994a: 199).

Carnival celebrates equality, and abolishes the ranking of hierarchy. In contrast to the immutable social structures that typically dictate details of everyday reality, carnival promotes freedom of thought, speech, and act. As Bakhtin writes, regarding the traditions of medieval carnival (Bakhtin, 1994a: 199):

"The suspension of all hierarchical precedence during carnival time was of particular significance. Rank was especially evident during official feasts; everyone was expected to appear in the full regalia of his calling, rank, and merits and to take the place corresponding to his position. It was a consecration of inequality. On the contrary, all were considered equal during carnival. Here, in the town square, a special form of free and familiar contact reigned among people who were usually divided by the barriers of caste, property, profession, and age. The hierarchical background and the extreme corporative and caste divisions of the medieval social order were exceptionally strong. Therefore such free, familiar contacts were deeply felt and formed an essential element of the carnival spirit. People were, so to speak, reborn for new, purely human relations. These truly human relations were not only a fruit of imagination or abstract thought; they were experienced. The utopian ideal and the realistic merged in this carnival experience, unique of its kind.

This temporary suspension, both ideal and real, of hierarchical rank created during carnival time as special type of communication impossible in everyday life. This led to the creation of special forms of marketplace speech and gesture, frank and free, permitting no distance between those

who came in contact with each other and liberating from norms of etiquette and decency imposed at other times."

One result of this freedom is the generative, creative influence of carnival upon individuals and society. Carnival is evident in the playful mockery of sacred cows, established institutions that deny their mutability.

Carnival blurs the distinctions between actors and spectators, authors and readers. Those who would be spectators are drawn in, to lend their voices to an emerging drama, whose endpoint may be unknown. The spectators and the actor are, at the same time, both subject and addressee (Kristeva, 1986: 46). While carnival is art, it is also life, and "everyone participates because its very idea embraces all the people" (Bakhtin, 1994a: 198). Kristeva, (1986: 49), building on Bakhtin's conception of carnival, said that "the scene of the carnival, where there is no stage, no 'theatre', is thus both stage and life, game and dream, discourse and spectacle." It is an aspect of the human condition governed by play and subject only to the laws of its own freedom as it serves the purpose of revival and renewal. Footlights do not exist, as "all the world's a stage" befitting carnival, and an attempt to separate it from the life of the participants would destroy it.

Finally, carnival is inherently intertextual, in that it borrows the forms and customs, rituals and ceremonies, of the authoritarian ideal. However, it then subverts them, turns them inside out, in mockery and self-mockery (Bakhtin, 1994a: 223). Clowns are proclaimed king, and then abused, thrashed, and ceremoniously uncrowned. The sacred

is parodied, an intrinsically intertextual action. Solemn processions become riotous parades, with the fine clothing of high office exaggerated into the colorful costumes of jesters and clowns. Yet, the conception of carnival as mere parody is too limiting. Carnival is at the same time disruptive, or, as Kristeva says (1986: 50), it is “*dramatic* (murderous, cynical and revolutionary in the sense of *dialectical transformation*)... The laughter of the carnival is not simply parodic; it is no more comic than tragic; it is both at once, one might say it is *serious*.”

#### DESCRIPTION OF THE QUALITATIVE PREDICTIONS

While the quantitative research investigates statistically justifiable effects and models having to do with the relationship between performance and surfacing information, the qualitative research takes a closer look at the process and its enactment. The value of postmodern approaches (like intertextual analysis) lies in their ability to address questions not readily broached by quantitative analysis. Kilduff and Mehra described how the cases at the ends of the distribution of performance can provide insight into contrasting processes leading to divergent results {Kilduff & Mehra,1997}.

"Postmodernism as an intellectual movement also calls attention to the margins and away from a preoccupation with some mythical center. This attention to the margins can be as literal as an attention to apparently unimportant but revealing textual marginalia such as acknowledgments (e.g., Ben-Ari, 1995; Derrida, 1988). But postmodernism also opens space for voices, texts, and viewpoints previously

neglected or ignored. As Rosenau (1992: 168) wrote, postmodernism 'focuses on what is nonobvious, left out, and generally forgotten in a text and examines what is unsaid, overlooked, understated, and never overtly recognized.' The standard modernist gesture is to focus only on the center and to ignore the margins. Thus, Searle (1970: 55-56; quoted in Derrida, 1988: 68), in describing his speech-act theory, wrote, 'In the present case, our analysis will be directed at the center of the concept of promising. I am ignoring marginal, fringe, and partially defective promises.' This is akin to the common statistical practice of dropping outliers from the data in order to concentrate on typical cases. "

In accordance with this philosophy, this qualitative analysis will consider the conversations of teams performing at the margins, with very high or very low profitability. Based on the theory discussed previously, several results are expected from the intertextual analysis. First, general expectations about the dynamics at work in the teams are addressed, then more specific expectations are stated.

From an intertextual perspective, as the participants in this research work together to solve a business problem they will be actively involved in the production and distribution of texts, both among themselves and to those "outside" researchers who are reading / will read this work. Threads and snippets of text will be borrowed and woven together from their own personal and social experience to create the fabric of the captured dialogue. This fabric will also include pieces taken from the instructions for completing the exercise, as well as interjections by myself, the researcher / interventionist.

Considering the exercise from the perspective of carnival, each participant (myself included) will play the role of actor / observer in the ongoing drama enacted in virtual space. Centripetal forces at work during the dialogue will pull each team toward a final, numerical (“phenotextual / lisible” rather than “genotextual / scriptible”) decision about the actions to take to “save the company”. The final, consensual decision by all members of the team will move the team toward a monologic understanding. I, the researcher, will also attempt to move the team toward this goal, and embody the voice of authority. These centripetal pressures will be countered, to varying degrees, by centrifugal forces incited by the need for each person on the team to meet his or her own individual goals. The additional incentive of structural competition between members of a team will pull them apart as they attempt to gain higher level goals than their teammates in the hopes of garnering a greater portion of the award.

The first specific expectation is the effect of signifiante on the meanings understood by the participants. From the perspective of intertextuality, the meanings are not fixed by the text, but are multiple. They may even run counter to the presumed wishes of the actors. In some cases, the effect of signifiante may seem clear, as genotextual aspects of the conversation apparently lead individuals to (sometimes-correct) conclusions not supported by the text alone. For example, if an actor says, "I can't do that", another may interpret the statement as a lie, yielding a very different meaning than taking the statement at face value. Which interpretation "wins" is expected to have an effect on the team's overall performance.



The opportunity for multiple meanings can be considered a result of the dialogue being read as phenotextual / lisible or genotextual / scriptible. Calling on the specific, undeniable outside authority of, for example, goal levels, is expected to shift the meaning toward the pole of fixedness, or serve to "anchor" the meaning, using Barthes' terminology. (As is the use of numbers or calculations in general, since mathematics is highly phenotextual / lisible.)

Consequently, it is expected that borrowing authority from the written text of the exercise will serve to make the experienced meaning more stable. For example, saying "6.9 is my limit" is more likely to be disbelieved than "My level one goal is 6.9", since the former does not anchor the statement by reference to the "authority" of the goal levels. It is expected that the more specific the reference to authority, the stronger will be the anchoring. So, for example, "My level one goal is 6.9" will serve to anchor meaning more effectively than "My goal is 6.9". In the detailed analysis of the conversations, instances of anchoring, or using the authority of the materials distributed with the exercise to bestow authority on an individual's statements are noted.

Finally, this research can be understood as a process of a team moving toward a single, monologic understanding. Each team member begins with his or her own, unique perspective and these perspectives need to be blended until a singular decision is reached. This "final decision" is then written down as the one statement "encompassing" the voices of all team members. There are two ways that this process can be expected to go

awry. The team may never be able to blend their perspectives because no "authoritarian voice" arises, whether it be formed from the combination of utterances from various individuals or from a single person whose text becomes the anchor for the multiple voices of the team. On the other hand, the process may go awry because an authoritarian voice does arise, but does so in a way that prevents some team voices from being incorporated into the final decision. These situations will be delineated more clearly as they occur in the analysis of the teams' conversations.

### Qualitative Procedures Overview

This section presents the results from the qualitative analysis. To describe them briefly, eight team conversations from the upper and lower extremes of the performance distribution were analyzed as part of this research. Two, one from each end of the distribution, were analyzed in detail. For these, most utterances were commented on. (The full texts of these conversations and comments made is available in Appendix B.) Each of these two conversations were then analyzed in detail, pointing out the dynamics taking place during the conversation (including anticipations and responses), the source of textual borrowings, and occasions where centrifugal or centripetal forces seemed at work. This analysis is referenced to the conversations in Appendix B. Then all eight conversations (four from each end of the distribution) were analyzed to look for larger intertextual patterns. When an individual made a comment based on his or her role profile sheet, the source of that information was noted (Profile / Opening position, Level

3 goals, Level 2 goals, or Level 1 goals). Charts were used to compare the temporal order in which the information was distributed within high and low performing teams.

## QUALITATIVE ANALYSIS

This portion of the study investigates the processes of producing text in teams at the margins of performance to highlight differences between their discourse. Two teams, one from the four most profitable and one from the four least profitable were randomly chosen for a full conversation analysis. The full conversations of these teams are located in Appendix B. The Roman Numeral of the conversation followed by the line numbers involved indicates references to the conversations. (So, for example, (I, 22-23) refers to conversation I, line numbers 22-23, which state "ok", "finance".) The two teams chosen for the detailed analysis and the remaining six teams (three with high profitability and three with low profitability) had tabular data generated demonstrating differences in the choices team members made about which portions of the exercise material to distribute.

From the perspective of intertextuality, all our "textual productions" (e.g., words, thoughts, and actions) are imitations and transpositions of the texts to which we have been exposed. It would thus seem that the issue of freedom of choice becomes problematic. However, with exposure to divergent texts we are able to choose those which we enact (and, in fact, experience a sense of the validity of alternative texts).

Since part of this research is based on Argyris' work it is interesting to note that this perspective appears in agreement with him. He asserts that people are not responsible for their "theory in use" because their programs for action have been successfully socialized (here I read, "shaped by textual exposure") since birth (Argyris, 1989: 168).

Thus a primary component of an intertextual analysis entails the revelation of choices individuals make, as they are involved in textual production. The participants involved in this research were engaged in the production and consumption of texts as they went about crafting the dialogue of their virtual team meetings. Not surprisingly, a large part of the text produced had its origin in the materials distributed as part of the exercise. The interest lies in the differences between those portions of texts members chose to distribute versus those withheld. Some of the text in the exercise materials (for example, the budget) was available for everyone to select, other parts were unique to a particular role and available only to the person that held that role. The role descriptions were unique for each role and composed of four main sections, the description/opening position, and goal levels one through three.

The role descriptions contained a clash of voices, each springing from an assumed stance of a member of the team. For example, the Personnel Director was concerned about job security, while the Finance Director was concerned about cost cutting. Conflicts and contradictions existed between the roles at various levels. For example, the Finance Director's opening position calls for an immediate pay cut of 10% for all regular

employees. This conflicts with the Union Representative's Level One goal. Therefore not all participants could reach their Level 3 goals if the team wanted to meet the requirements of the game. If, however, all of the required roles made the concessions necessary to meet their Level One goals, there were no contradictions and the team profitability was maximized. The following three sections describe and illustrate the dynamics that occurred during the team conversations.

### Polyphony and the monologic

To be successful in the terms that I, the researcher, defined them, a team had to chart a course through the polyphonic conflict of voices to a single, univocality expressed in the monologic "Final Decision Sheet". Voices had to be stated, conflicts unearthed, and contradictions negotiated for the team to arrive at a profitable conclusion. Low profitability teams tended to do poorly at this process in two ways. To illustrate, if a suggestion was made that conflicted with a Level 1 goal, and no statement was voiced in opposition to it, a monologic discourse might emerge too soon, and the team could not meet the requirements of the exercise. (See, for example, the Union Representative's agreement (II, 38) with a ten percent employee salary cut, which conflicted with his Level 1 goal of less than a 9% salary cut if no employees were fired.) On the other extreme, repeated statements of opposing voices without resolution could impede the progress toward a monologic conclusion and delay it to the point that it could not incorporate the varied voices. (As partially occurred in (II, 17-28).)

## Centrifugal and Centripetal forces

Highly profitable teams were able to harness the effect of centripetal forces moving members toward a univocal team decision, while low profitability team tended to be governed by centrifugal forces pulling the members apart. Statements embedded in the team's instruction sheets and made by myself at the beginning of the exercise about the \$500 prize to be awarded to the team with the highest profit, exerted a centripetal force on each team. These texts moved teams not only toward a final, monologic decision (documented on their "Final Decision Sheet") but also toward a *particular* decision, one with all required roles at their Level One goal. The need for all members of the team to be at Level 1 goals was recognized by the team members (I, 33, 43, 256, 314) (II, 189, 200, 462). Leadership by one or more team members contributed to the team moving toward those goals. The centripetal forces were countered, however, by centrifugal forces. An important text engendering centrifugal forces was the statement in the instruction packet (and written on the chalkboard at the beginning of the exercise) that the prize money would be awarded to team members based on their relative goal attainment. Not only did this provide an incentive for individuals to attain the highest possible goal level; it also had the potential of shifting the *significance* of statements made by team members during the exercise. Individuals' statements about what actions were and were not possible could be laden with an additional, ulterior meaning, including the possibility of deceit and subterfuge (II, 80). Whether true or not, these allusions and forces added to

the depth of the exercise by allowing participants to not only play within the roles of the exercise, but also to play roles of intrigue (e.g., the Development Director (I, 261) acting out of self-interest while pretending to sacrifice and cooperate as much as possible).

### Carnival and the exercise

The potential for roles within roles highlights carnivalesque aspects of the exercise. Kristeva (1986: 49) described an attribute of carnival that seems fitting for this exercise.

“A carnival participant is both actor and spectator; he loses his sense of individuality, passes through a zero point of carnivalesque activity and splits into a subject of the spectacle and an object of the game. Within the carnival, the subject is reduced to nothingness, while the structure of the author emerges as anonymity that creates and sees itself created as self and other, as man and mask.”

The participants in this study were not only students, they were also playing roles from the exercise. While watching, they were also acting out the drama of their creation. I, too, as the researcher, was drawn into the spectacle, playing the role of administrator and participant. We were reduced to playing out the roles allotted us in fleeting bits of information, and at the same time freed to author the narrative as it unfolded. The game was enacted in the nothingness of cyberspace, the text captured and transferred to paper. The words are waiting, concupiscent, poised to burst forth with meaning at the next reading, re-staging the spectacle.

## Detailed analysis of the conversations

This section looks more closely at the conversations in Appendix B, highlighting their intertextual aspects, including the effects illustrated in the previous three sections. Because of the length and number of conversations, these two have been randomly chosen from the four most and least profitable teams to illustrate the intertextual processes occurring within high and low performing teams. Conversation I is that of a high profitability team (from the Internally Facilitated Treatment group), while conversation II is that of a low performing team (from the Untreated "Control" group). Locations in the text where individuals borrowed from the description/opening position or goal levels one through three are noted to point out portions of the exercise materials that the participants chose to distribute. The researcher's commentary on the effects of centripetal / centrifugal forces and the team's move toward resolving conflicting voices are inserted in italics.

Conversation I – High Profitability. The conversation began with a call for unity in order to win the \$500 prize. Shortly thereafter (I, 16-18) team members begin by making suggestions borrowed from their opening positions that entail very little or no harm to their own higher level goals. The Union Representative and Personnel Director follow (I, 25-26) with suggestions from their opening position which they say they are "supposed to say". Alternatives framed as sacrifices followed (e.g., "I can get away with..."), which in fact support individuals' higher level goals.



*At this point, the conflicting voices embedded in the team members' positions have not even been stated, much less resolved. Despite calls for unity, the team has made no progress towards it.*

The budding unanimity is dealt a sharp blow when the Finance Director asks about a 10% pay cut for all employees (I, 27), which conflicts with the Union Representative's Level 1 goals. The Union Representative says that he "can't do that" (I, 31) because "everyone must have level 1 to compete" (I, 33). When asked specifically for the level 1 goals (I, 37) he does not actually state them, which allows him to maintain negotiating power. However, this response also fails anchor his response to the authority of the text. Rather he questions whether everyone should be at Level 1 (I, 43). This response is important in two ways. First, it opens the way for an equal footing, where everyone aims for a Level 1 goal. This allows the Union Rep to maintain equality with other team members. Second, it allows a dialogue about strategy for winning as a team. If everyone is at a level one, the centrifugal force pulling members away from a univocal decision diminishes. The frame becomes one of winning altogether over other teams rather than beating fellow team members over a slice of the \$500. This perspective is stated by the Personnel Director's (I, 50-51) statement, "We can always disperse the money after if we want".

*Conflicting voices are beginning to be surfaced. They have not, however, yet begun to be reconciled. Centripetal forces are beginning to pull the team toward a mutual decision as the power of the individual prize is eroded by assurances that the prize money could be re-distributed by the team.*

However, the Development Director asks (I, 54) if everyone can do the 10% cut, even after the Union Rep's statement that it is impossible. The Union Rep repeats that an overall 10% cut is impossible (I, 59) borrowing text from his profile which states that management must take a bigger cut than workers, while still not stating his Level 1 goals. Triggered by the Union Rep's statement, the conversation then shifted to a discussion of management salaries. The Finance Director suggested (I, 61) a 16% management cut borrowed from Finance's opening position, combined with a 10% cut for workers (I, 67). This suggestion meets the Union Rep's stated requirement that management take a bigger cut than workers. Since the Union Rep's assertion that 10% is impossible has not been anchored, it lacks the authority of the text and has a different significance. The Union Rep does not agree (I, 68) because this does not meet his Level 1 goals.

*The full conflict between the Union Rep's role instructions and the higher level goals of other team members have not yet been unearthed. Until the conflicting voices are heard they cannot be reconciled.*

The Development Director reveals his Level 2 goals (I, 74-75) and asks about other's. This further erodes the power of the forces pulling the team away from a univocal decision. The Union Rep responds by revealing part of his own Level 2 goals (I, 76-77). The Finance Director then makes a suggestion for firing managers from Finance's Level 2 goals (I, 79) along with a compromise on management pay.

*The Development Director's leadership acts a centripetal force pulling the team toward a common (monologic) goal. He is the first to state a goal, which leads others to do so as well. As the conversation progresses his leadership becomes more directive, while*

*remaining open to the needs of other team members, allowing the conflicting voices to be reconciled.*

After the Development Director again calls for unity (I, 82), he directs the Union Rep to "stay at Level 1" (I, 84) in the apparent belief that it has been met based on the Union Rep's (I, 59) argument that management must take a bigger cut than workers. The Development Director then assures the Union Rep that the prize money would be split evenly (I, 87). This further erodes the team's internal competition. Both the Union Rep and the Development Director recognize that the reduction of internal competition will help them win. However, since the Development Director is still not aware of the Union Representative's Level 1 goals, he still believes that a 10% employee salary cut is acceptable (I, 93).

When the Union Rep again states his disagreement with this pay cut (I, 97) the Development Director inquires as to why not (I, 100). In the terminology of the quantitative portion of this study, this is a proxy intervention to deal with deletions, and it is a critical point for this entire conversation. With the gradual removal of centrifugal forces keeping the conversation at the conflicted opening position and upper goal levels, members of the team have been choosing to weave more of their goals (down to Level 2 (I, 101)) into the conversation. But this inquiry triggers the Union Rep to distribute his Level 1 goals to the team (I, 102-104), anchoring his assertions with the authority of the exercise's text. Other team members follow suit as the text progresses.

*The Union Rep's choice to insert his Level One goals into the conversation furthers the progress toward a monologic decision by bringing issues of equality into play. A kind of*

*social contagion of revealing information begins to occur. If only one person would reveal this information it would create vulnerability, if all do so it creates equality and higher team performance.*

After some team members check for conflicts based on other opening positions (I, 109, 112), the Development Director states one of his own Level 1 goals (I, 117) having to do with his own salary. The Personnel Director states Personnel's Level 2 goal for the Director's salary as well as revisits management salaries, which is discussed and agreed to (I, 121-131).

*As the conflicts are voiced, they are able to be resolved.*

However, the Development Director returns to the 10% worker salary cut (I, 132). There are at least two possible explanations for this action. First, it may be a result of simple inattention by the Development Director. But it also may be a result of the multiplicity of meanings, the signifiacnce, embedded in the Union Rep's words, partly resulting from the structure of the exercise. The Development Director may be reading the meaning of the Union Rep's statements as a subterfuge.

Both the Development Director and the Finance Director then inquire into the Union Rep's requirements (I, 135-136), at which point he repeats his Level 1 goals (I, 138). After this information is clarified and absorbed by the team (I, 140-147) the Development Director decides to fire 5 employees (I, 148) with a 7% cut (I, 151). In one sense, linking the actions required for Level 1 goals to the statement that they are Level 1 goals may act to bequeath the statement with a greater authority than a statement without mention of the

specific goal level. This authoritarian voice is important in moving the team toward a single, unified decision.

*Again the leadership of the Development Director acts as a centripetal force by pulling the team together toward a monologic decision. Throughout this team's conversation the Development Director continues to serve a centralizing role, by asking for input, directing the conversation, and making decisions, which the team then accepts. It is possible that the Development Director provides the nucleus for the emerging monologic voice of the team.*

After the team calculates savings and compares them with keeping all employees with a 9% pay cut, the Development Director turns the team's attention to firing managers (I, 164). He inserts a proposal from his Level 2 goals (I, 165), which is not opposed. The Union Rep then asks to verify management salaries (I, 171) at 25K, prompting agreement. This leads the Union Rep to make the comment "and directors down as much as possible (I, 176), which the Development Director responds to by offering to go to his Level 1 (I, 179, 185) and asks what other Directors can do (I, 186). This question does not gather a response.

*As the conflicting voices are being reconciled, new avenues are explored to determine specific actions to be taken that would benefit the entire team.*

The next period sees a flurry of calculations (a move toward the phenotextual / lisible) to determine the profit achieved to this point (I, 190-212). The Union Rep then inserts a proposal from his opening position (I, 215, 219) which is mostly in agreement with the team's previous decisions. The Personnel Director then steps out of role to inquire about

the rules of the game (I, 222), leading to a general discussion of the rules (I, 223-235). The Union Rep and Development Director state their satisfaction with the decisions so far (I, 235-241) and the Development Director inquires with other team members (I, 242). Shortly afterward, the Personnel Director proposes merging, drawing from Personnel's opening position (I, 245), but then says it is not a requirement (I, 247). The Finance Director responds by stating that merging is impossible (I, 254), which is based on Level 1 goals.

*The sensitivity toward other team members' requirements helps the team move toward a monologic decision. It enables the conflicts to be voiced and reconciled. Rather than insisting on a course of action over the objections of others, the team has reached a point where the members seem to trust one another, rather than hearing meanings of duplicity.*

Since the Union Rep has revealed his Level 1 goals, it is understandable that he would want others to also be at Level 1 to ensure that the prize money be divided equally. So he suggested that everyone be at Level 1 (I, 256). The Development Director agreed (I, 257) and suggested that he was at Level 1 (I, 261), though this is not entirely true because Development still had two managers rather than the one permitted under Level 1. The Personnel Director stated (I, 265) the only unmet Personnel Level 1 requirement, that at least 3 managers be kept. This led the Union Rep to inquire about firing more managers (I, 267). . Meanwhile, the Finance Director added to the team's Level 1 revelations by stating Finance's Level 1 goals (I, 268).

*The team members have now fully committed to choosing to insert their Level 1 goals into the conversation. While there are a few items that still need to be reconciled they*

*have moved in many areas toward a monologic decision that reconciles the conflicting voices embedded in their role information.*

The team moved on to questioning whether Directors could be fired, and, with the Development Director's Level 1-based assertion that he couldn't be cut (I, 272) went to discussing Director's salaries. The Finance Director suggested \$40K (I, 275) (part of Finance's opening position) while the Development Director repeated (I, 277) his level 1 position of 35K, and then goes on to ask for everyone else's minimum salary requirements (I, 278). While there was no salary requirements in Personnel's Level 1 goals, there was a statement on the profile sheet that the Personnel Director would be willing to cut salaries as much as other departments. The Personnel Director seems to follow this edict when saying that Personnel's maximum cut was to \$35K.

*Nearly all conflicts have now been surfaced and resolved.*

After having settled the major conflicts among the voices of the profile sheets, the team began a period of retrenchment and cleaning up loose ends. During this period the team heavily borrowed from texts it had already produced, revisiting and expanding upon them. The Finance Director raised the issue of a required surplus (I, 294) from the Level 1 goal, which did not result in any changes to the team decisions. The manager salary decision was also revisited (I, 304-312) with no change. The Union Rep stated the (correct) belief that the way to win the \$500 was to have everyone at their Level 1 goals (I, 313). Then the team (led by the Development Director) revisited its decisions and calculated savings (I, 314-378). A new issue that arose several times (I, 325, 371, 379) was putting money in the project budget. The team had difficulty making this decision (I,

381-423) apparently missing the instruction from the budget sheet that the maximum that could be added to projects was \$20K.

*The team moved through a process of surfacing the polyphony of conflicting voices and then resolving them to achieve a monologic understanding. Centripetal forces such as the desire for a team victory, the desire for equality, and the leadership of the Development Director helped the team along this path. During the journey, team members chose to insert most of the information in their Level One goals, which made them vulnerable as individuals but allowed the team as a whole to be successful.*

Conversation II – Low Profitability. The Finance Director begins with a statement advocating a ten-percent cut in salaries borrowed from her opening position. Her proposal (II, 4) conflicts with the Union Representative's minimum, Level 1 requirement of less than a nine percent cut in employee salaries. The Union Representative then (II, 6) suggested that the Finance Director be fired. The Chair disagreed with the firing (II, 8) but suggested having the 10% cut apply to everyone (II, 9), drawn directly from his opening position. The Union Rep agrees and tracks the amount of money owed (II, 12, 14), apparently oblivious to the conflict with his Level 1 goals.

*The conflicts between the various positions are either being ignored or not being stated. Individuals are choosing to inject texts from their opening positions, which are the most highly conflictual available.*

A succession of proposals based on team member's opening positions then follows. These proposals are not well discussed, or even agreed to by the team members. It



appears that the members of the team are parroting (choosing to distribute) their opening positions. The following proposals based on opening positions were made:

1. The Finance Director suggests cutting manager's salaries (II, 15).
2. The Chair suggests cutting \$35K from projects (II, 17).
3. The Personnel Director suggests merging Finance and Development (II, 18)
4. The Union Rep suggests firing managers (II, 19).
5. The Finance Director suggests adding to projects (II, 20) rather than taking from them (II, 22).

These proposals are followed by a few comments against or in support of them (II, 23-25, 27) without moves toward resolution.

*The dialogue is scattered, a cacophonous polyphony, as disparate voices are not being influenced to move toward a single monologic voice. Individuals appear to be influenced to a great degree by the centrifugal force created through the promise of higher individual rewards based on relative goal attainment.*

At this point the Union Rep and Chair repeated their proposals (II, 26, 28). The Chair's call for an all employee salary cut of 10% meets with agreement by the Finance Director (II, 29) (who first made the proposal for a 10% cut on line 4) and by the Personnel Director (II, 31) (whose profile sheet contains such a cut). When the Chair checks for agreement on the cut (II, 34) all agree (II, 35, 36, 38, 40) except the Development Director, who is silent. The Union Rep still has not given voice to the conflict this engenders with his Level 1 goals. Suggestions are added to adjust the manager's salary (II, 37), and to fire one (II, 41), two (II, 42) or no (II, 43) managers, each based on

individual opening positions. The Union Rep inquires into the Chair's call for no firings (II, 44) without an explicit response beyond "we should try to keep them" (II, 49).

*The key conflict concerning the Union Rep's Level One goals has not yet been surfaced. Individuals are still choosing to select texts from their opening positions (which, if enacted, would provide them with an individual advantage over their fellow team members) into the conversation.*

The Personnel Director repeats the mantra from his opening position for merging Finance and Development departments (II, 45, 48), supporting this suggestion with a call for "efficiency" (II, 51). Both Finance and Development oppose this (II, 50, 52), though they cite budgetary issues for support rather than their Level 1 goals, which direct them to retain their position.

*The Personnel Director's attempt to impose a monologic decision to merge the two departments is not succeeding. While conflicts between the voices are being voiced, they are not being resolved. (Statements of disagreement are not resolution.) Positions are not being anchored in the authority of the written text (e.g., "My Level X goal says...") and, hence, are open to multiple interpretations, especially those involving duplicity and attempts to gain an advantage over the other team members.*

The Chair asks if the departments should be merged (II, 53) and receives conflicting responses (II, 54-60) still gathered from the level of opening positions. The Chair then revisits the 10% wage cut issue (II, 61), which is still met with agreement (II, 62-69). The Union Representative still has not given voice to the conflict with his Level 1 goals. The Personnel Director continues voicing his opening position (II, 60, 68, 71), then asks

for the reasoning that would prevent merging (II, 74). The Chair raises the question of who would be fired if the merger occurred (II, 75), the Development or Finance Director (II, 78). Meanwhile both of these Directors refrain from citing their Level 1 goals and, instead, cite other issues in defense of not merging (II, 76-77). The Development Director and Personnel Director simultaneously suggest that the Finance Director be fired (II, 79-80). The Personnel Director illustrated his reasoning (II, 80) behind this suggestion by saying, "I felt this was a good way of making everyone realize that this exercise is not a competition, but an attempt to find consensus and a agreed upon, economically sound way of saving our company." This has several implications. First, it implies that the Personnel Director does not believe that everyone realizes that the exercise is not a competition. This is a nod to the centrifugal force of the reward for individual goals pulling the group away from a unified decision. The significance of what the Personnel Director has read so far includes meanings involving competition. Second, this implies a call for unity in order to overcome these centrifugal forces. This implication is stated more openly as the Personnel Director calls on the group to work together to save the company (II, 87), followed quickly by the Union Rep calling for the Finance Director's firing (II, 88).

*Centrifugal forces still predominate. The conflicts are being voiced, but are not being resolved. Calls for unity are ineffective as the team members have not yet stated their primary goals, which would make themselves vulnerable to inequality.*

The suggestion to fire the Finance Director is followed (within ten seconds of the call to work together) by the Finance Director insulting the Union Rep (II, 90) leading to insults

in response from the Union Rep (II, 91-92). The mere request for unity does not make it so.

*The conflicts between voices within the position sheets have expressed themselves as conflicts between individuals.*

After some regrouping, the Personnel Director repeats the call for unity (II, 100), and the Finance Director makes a suggestion based on her opening position (II, 102). This is followed by the Personnel Director repeating the proposal to merge Finance and Development (II, 103).

*As a researcher, I am associating the Personnel Director's continued calls for both merging and unity as involving the meaning that, to the Personnel Director, "working together," means "do what I tell you". This is akin to Argyris Model I governing value of "win, rather than lose", and could be partly responsible for the difficulty the group is having moving toward a resolution of the conflicting voices in the exercise.*

The Development Director states a proposal from his opening position that managers in Personnel should be fired (II, 104-105), possibly as a response to the Personnel Director's continued calls for merger. Both the Chair and the Finance Director agree (II, 107-108) while the Personnel Director restates the calculations from his opening position citing the savings from a merger (II, 109). The Union Rep responds that more money needs to be saved to win the \$500 (II, 112). After the Finance Director echoes the call for firing Personnel Managers (II, 115) the Personnel Director suggests that only one be fired (II, 116), which is agreed to by the Chair (II, 117). However the Finance Director suggests cutting two (II, 119) which is a restatement of her opening position that two managers

should be fired. She clarifies that they should come from Personnel, not Finance (II, 122). The Personnel Director, however suggests firing from Finance (II, 118) and says that firing two managers “will not be necessary” (II, 120). Meanwhile, the Development Director proposes firing two managers from Personnel and one from Finance (II, 123).

*Each Director making the suggestions mentioned in this paragraph aims at reducing the number of employees in another Director’s department. The suggestions do not affect the suggestor’s department and are consistent with his or her opening position. While there may have been talk of “working together”, the suggestions are supportive of individual, rather than team, goals. The polyphony continues.*

The Personnel Director raises an objection to firing his managers by saying that “without that manager we have no authority to fire or hire anyone” (II, 128). The Personnel Director seems to have taken “manager” to mean “Director” which his profile states is the only person able to hire and fire. This objection is countered by the Chair suggesting that regular employees be laid off (II, 129-131), which the Finance Director agrees to (II, 132-133) and suggests that 30 regular employees be fired (II, 136). The Development Director is opposed to the suggestion to fire workers (II, 135) since his position profile states his preference that “all 100 regular employees need to stay on the work force”, and this opposition is echoed by the Personnel Director (II, 139, 142).

*Individuals continue to use anything but their primary goal levels to support their positions. The conflicting voices embedded in their opening positions continue to drive the team apart.*

The Chair then suggests firing one manager and cutting the salary of the other two in Personnel (II, 143) which raises the issue of how much money is saved by managers in the various departments (II, 147, 150), drawn from the budget sheet. The Development Director repeats his proposal of firing two managers in Personnel and one in Finance (II, 149), again at no harm to himself. This leads the Personnel Director to return again to merging Finance and Development (II, 151), which is countered by the Finance Director suggesting laying off one of the three Personnel managers (II, 152). The Finance Director revealed the thinking behind this response during the Reflection Period (II, 152) by saying, "All he keeps saying is merge, merge, merge, that is how I feel. He keeps saying that and I don't agree, and I don't retain level one position if we merge." Her reaction also is consistent with her Level 3 goals, which include keeping all 3 managers in the Finance Department.

*While the Level 1 goals from each individual's profile sheet remains unvoiced the conflicts cannot be resolved. The centrifugal forces created by the promise of individual rewards are still driving each group member to the highest possible individual goal.*

The Personnel Director responds to the suggestion to fire a Personnel manager by resorting again to a call for unity, "Don't get personal. This is about the future of the company" (II, 154). The Finance Director responds by appealing to the authority of the budget, and says that merging will lose \$140,000 (II, 156). Though this number is actually the annual expenditures of the Finance Department, rather than revenue, the appeal has the effect of reducing any Chair's support for a merger (II, 160). But the

Personnel Director continues to support a merger by saying it will cut costs and improve efficiency (II, 163-168).

*The Personnel Director is still attempting to impose a monologic decision without taking into account the conflicting voices of the other team members.*

The Finance Director suddenly agrees to a merger (II, 170), which is agreed to by the Chair (II, 182) and Personnel Director (II, 183). The Finance Director then reveals that this action is in violation of a Level 1 goal (II, 184). The Development Director responds by citing the rule from the instructions that everyone must achieve Level 1 (II, 189). While there is some discussion as to whether the Finance Director really should do this (II, 191-196), she asserts that she will, that she “doesn’t care” (II, 197-198).

*The Personnel Director seems to have succeeded in imposing a monologic decision. The Finance Director appears to have silenced the conflicting voice of her Level One goals out of weariness.*

The Chair reveals concern at this point that the Finance Director won’t reach Level 1 in comments during the Reflection Period by saying, “In order to make the company succeed we all need to reach level one and if merging a company does not allow one person to do this, then I’m sure that we can think up another solution” (II, 199). The Development Director suggests that everyone be at Level 1 to save money (II, 200).

*With one of the conflicts between opening positions and Level One goals surfaced and anchored in the authority of the text, the team appears ready to make a fresh (though late) start towards resolving those conflicts.*

At the beginning of the next negotiation period, the Personnel Director suggests that everyone look at their level two and compromise (II, 205-206). He made a proposal to fire five workers and one manager from each department (II, 207) based on his level 2 goals. The move to Level 2 was echoed by the Chair, who revealed her Level 2 goal (II, 212). The team agrees to the Personnel Director's proposal, with the exception of the Union Rep, who voiced the conflict with his Level 1 goals by saying that he needed less than a 7% pay cut (II, 221). When the Personnel Director suggested that he need not fire five workers (II, 225), the Union Rep revealed that even with firing no workers he still needed less than a 9% pay cut (II, 227), finally revealing the conflict with Level 1 goals. The Personnel Director repeated information from his Level 2 goals, saying that he could fire five employees and save \$100K (II, 231). After the Chair suggested reducing management and Director salaries to the minimum (II, 233), the Personnel Director asked if the group could agree to the 9% salary cut (II, 235, 239). Just as the Personnel Director tells the team to look at their managers (II, 248) the Development Director estimates savings at \$245K (II, 249). This leads the Union Representative to ask where the \$200,000 is coming from (II, 251), which the Chair cites as being a result of the 10% across the board wage cut decided earlier (II, 260). When the Union Rep states that he can't do that (II, 261), the Finance Director suggests 9% (II, 262), knowing that the Union Rep could not cut more than that from the previous discussion. The team resolves the conflicting voices by settling on a 9% cut for workers' salaries (II, 269-274).



*Though the Development Director had suggested that everyone be at their Level One goals, one member's suggestion led them to insert the texts from their Level Two goals into the conversation.*

The team then (II, 275-279) moves to discussing firing managers (part of several suggestions made in the exercise materials). But before doing so, they calculate savings so far (II, 280-292), a move toward the phenotextual / lisible. The Finance Director makes a suggestion for a management pay cut drawn from her opening position (II, 294, 299) while the rest of the team struggles with determining savings (II, 296-301). As part of the calculations, the Development Director states that the team has fired three managers (II, 296-297), which the Personnel Director responds to with a statement that he has to save seven managers (II, 304) (drawn from his Level 3 goals). (It is noteworthy that the Personnel Director cites a Level 3 goal as a requirement when just minutes earlier he had suggested everyone be at Level 2.) The Union Rep suggests only firing two then (II, 307), which the Development Director uses as grounds for a suggestion that the two come from Finance and Personnel (II, 309) which would allow him to meet Level 3 goals. The Finance Director appears to want to preserve all her managers (and achieve Level 3) because she makes the argument (citing budget figures) that the managers in Finance give the company the most money (II, 310, 315). The Chair suggests that the management be paid the minimum salaries, then (II, 316). When the Finance Director agrees to this (II, 317-318), the Development Director commented "There goes our savings" (II, 319). In explaining this comment during the Reflection Period, the

Development Director said, “This is where everything is falling apart. We can’t compromise, things conflict and such. The numbers don’t work out.”

*The centrifugal forces driving individuals up to their higher level goals at the expense of the overall team outcome are still dominating the texts chosen for distribution by the team members. They are, however making some progress towards resolving a few of the conflicts.*

The Personnel Director again asks for the sources of savings to be made clear (II, 320), but before that happens, the Development Director suggests that everyone compromise, leaving only one person at Level 3 (II, 326) and that if the money is won it be split evenly. The Personnel Director responds by saying it is better to have everyone sort of happy than to make someone really happy (II, 334). These calls for one form or another of working together are followed by agreement from the Union Rep, Chair, and Finance Director (II, 334-339). Rather than exploring the inherent conflicts in these views, the Union Rep then repeats the Personnel Director’s suggestion by saying that the “whole Finance department” should be “gotten rid of” (II, 340) and the Chair suggested cutting \$35K from projects (II, 341) (based on her opening position). These suggestions provoke a new series of disagreements about how to win (II, 343-362), culminating in a call for the Chair to make the decision (II, 363-364).

*The conflict between voices in the positions had earlier expressed themselves as conflicts between individuals. The individual conflicts continue to reverberate within the conversation, with the Finance Director remaining a target. The text calling for the*

*removal of the Finance Director, once uttered earlier in the conversation, continues to recur.*

The Chair asks what would help the most (II, 369) to which the Personnel Director suggests having everyone on Level 2. The Chair then states her needs for Level 2 (II, 372-373) and asks what everyone else needed (II, 376). The Union Rep stated that he needed to stay at Level 1 (II, 377-378) but the team agreed that everyone else should be at Level 2 (II, 379-383). As the team looked to the Chair for guidance (II, 384-389), she asked if anyone could be fired (II, 390). The Union Rep and Personnel Director suggested firing the Finance Director (II, 391-392). Though the Chair said, "Seriously... let's fire a regular employee" (II, 397, 403), the others took up the suggestion to fire the Finance Director (II, 400-402, 405-407, 413-415). The Finance Director responds by suggesting that 10 regular employees be fired (II, 421) which leads the Union Rep to cite his requirement to strike if that would occur (II, 426). The Union Rep then states his Level 1 goals of allowing five to be fired, as long as the salary cut is 6.9% (II, 427, 431). The Development Director responds by suggesting that five be fired and the rest receive a salary cut of 10% (II, 433), while the Chair suggests only firing one (II, 435). The Union Rep disagrees, saying that it is either fire five or keep them all (II, 439). The Development Director offers his resignation (II, 442) along with his whole department (II, 452), while Finance suggests firing five employees (II, 445) and the Personnel Director implies blame (II, 450) (probably toward the Finance Director). The Finance Director calls for keeping the company in mind and reminds the Development Director that he needs to achieve at least a Level 1 goal (II, 456, 461). As time is running out for

the last negotiation period the Chair asks if everyone is at Level 1 (II, 462) while the Union Rep becomes abusive toward the Finance Director (II, 463-467). She responds to this by resigning along with her entire department (II, 470).

*The team failed to achieve a monologic decision. It remained stuck in a cacophonous polyphony of conflicting voices. Calls for unity were not effective in helping the team move toward a resolution of these conflicts, driven in part by the centrifugal forces pulling the team apart.*

Comparison of conversations. The analyses of these conversations illustrate that, throughout the dialogue, individuals borrowed from the exercise materials. Individuals in both teams began by choosing to distribute portions of the exercise materials that supported their attainment of higher level goals, especially the opening position (I:16-26) (II: 4-22). However, the high performing team moved progressively toward distributing textual threads from lower level goals (I: 74-79, 101-104, 117-131), which permitted the team to surface and then resolve the conflicts so that they could eventually achieve a monologic stance allowing higher team performance (I: 304-378). The more profitable team was thus able to achieve a unified, profitable decision. The less profitable team, on the other hand, appeared to remain captive to the centrifugal forces generated by the promise of a larger individual distribution of the prize money since its members chose (even fairly late in the game) to continue to distribute information from their opening positions and Level 3 goals (e.g., II: 294, 299, 304, 341, 391-392). (As later analysis in

this chapter will show, earlier revelations of Level One goals are associated with higher performance.) The result was a cacophonous polyphony (II: 390-470).

## QUANTITATIVE INTERTEXTUAL ANALYSES

Intertextuality can be used as a basis for predictions relating the extent to which the team's conversation is phenotextual / lisible, the teams' selection of texts, and the impact of centripetal / centrifugal forces, to team performance and possible effects of Model II interventions. This portion of the analysis uses a quantitative approach to address several predictions.

### Phenotextuality / Lisibility and Performance

Texts with high phenotextuality / lisibility limit the number of possible readings, moving the reader toward a monologic understanding while genotextual / scriptible texts enlarge the number of possible readings. Whereas scientific and technical texts are highly phenotextual / lisible, poetry is highly genotextual / scriptible. Since the exercise done as part of this research required the teams to move toward a consensual (monologic) decision about layoffs, salaries, and project budget, it is worthwhile investigating whether measures of the extent of phenotextuality / lisibility are related to team performance. It is expected that if the text is highly phenotextual / lisible, the team will be better able to

come to a common understanding of what is necessary to succeed, and therefore have increased profitability. This leads to the hypothesis:

Hypothesis 4) Greater phenotextuality / lisibility leads to higher profitability.

A model illustrating this relationship appears in Figure 5.1.

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Insert Figure 5.1 here

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The language of mathematics is exceedingly phenotextual / lisible. It is also reasonable to conjecture that greater numbers of calculations involving the amount of savings resulting from various courses of action would result in greater profitability, since calculating savings along the way can help a team compare various alternatives and track the total amount of money saved so far. Therefore the number of calculations of savings can be one measure of the extent of phenotextuality / lisibility.

The previous model can thus be operationalized as shown in Figure 5.2.

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Insert Figure 5.2 here

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Operationalization of Variables. Team profitability was measured in the same manner as the previous analysis. The number of calculations of savings was determined by counting the number of unique savings calculations made by each team for example “firing three managers saves \$90,000). (Teams would often repeat savings calculations several times, so the number of unique savings calculations was used rather than the total.)

Analysis of the Model. The model was tested using data from all teams. Data were standardized before the regression was run.

*Unique savings calculations – all teams.* Table 5.2 contains the results of this regression with “Team Profitability” as the dependent variable.

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Insert Table 5.2 here

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For this operationalization, there is a significant relationship between the number of unique savings calculations and team profitability. R Square is 0.07427. However, most curiously, Beta is negative. This means that greater numbers of calculations of savings result in lower profitability. Thus the expected relationship is not supported.

## Interventions and Phenotextuality / Lisibility

The interventions used in this research are designed to help teams surface information and reasoning more explicitly. More specific statements should move the conversation toward greater phenotextuality / lisibility, since the range of possible interpretations becomes more limited. Therefore it is expected that interventions should cause the text to be more phenotextual / lisible than where there are a smaller number of interventions or none at all. This leads to the hypothesis:

Hypothesis 5) Interventions lead to greater phenotextuality / lisibility.

A model illustrating this relationship appears in Figure 5.3.

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Insert Figure 5.3 here

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Operationalization of Variables – Model II treatments. As in the previous analyses considering the relationships between Model II interventions and the surfacing of information, Model II interventions can be operationalized from the perspective of either membership in the treatment group or by the number of instances of interventions in the team conversations. As in the previous analysis, the degree of Phenotextuality / Lisibility



of the text is measured by the number of calculations of savings made by the team. For the first analysis, this model can thus be operationalized as shown in Figure 5.4.

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Insert Figure 5.4 here

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Analysis of the Treatment – Savings Calculated Model. The model was tested using data from all teams. Data were standardized before the regression was run.

*Model II treatment – all teams.* Table 5.3 contains the results of this regression with “Calculations of Savings” as the dependent variable.

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Insert Table 5.3 here

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For this operationalization, there is no significant relationship between treatment and savings calculations.

Operationalization of Variables – Instances of Interventions. For this analysis, instances of interventions are used as a measure of treatment. As in the previous analysis, the

degree of Phenotextuality / Lisibility of the text is measured by the number of calculations of savings made by the team. The model for this analysis is presented in Figure 5.5.

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Insert Figure 5.5 here

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Analysis of the Intervention Instances – Savings Calculated Model. The model was tested using data from all teams. Data were standardized before the regression was run. To review, there were six kinds of interventions that were used in this research. They were exact and proxy interventions that were designed to help in situations where there were deletions, distortions, and generalizations. As before, the proxy intervention to assist in the case of distortions variable was deleted and is not a part of this analysis. In addition to checking for significant relationships using each of the five remaining variables, the analysis was also done using summations of these variables, specifically “All Exact interventions”, “All Proxy interventions”, “All interventions to deal with deletions”, and “All interventions to deal with generalizations”.

*Proxy interventions to assist in cases of Deletions.* Table 5.4 contains the results of this regression with “Calculation of Savings” as the dependent variable.

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Insert Table 5.4 here

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The model is not supported when using this particular operationalization of the intervention variable.

*Proxy interventions to assist in cases of Generalizations.* The results of this regression with “Calculation of Savings” as the dependent variable appear in Table 5.5.

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Insert Table 5.5 here

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The model is not supported when using this particular operationalization of the intervention variable.

*Exact interventions to assist in cases of Distortions.* Table 5.6 contains the results of this regression with “Calculation of Savings” as the dependent variable.

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Insert Table 5.6 here

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The model is not supported when using this particular operationalization of the intervention variable.

*Exact interventions to assist in cases of Deletions.* The results of this regression with “Calculation of Savings” as the dependent variable appear in Table 5.7.

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Insert Table 5.7 here

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The model is not supported when using this particular operationalization of the intervention variable.

*Exact interventions to assist in cases of Generalizations.* The results of this regression with “Calculation of Savings” as the dependent variable appear in Table 5.8.

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Insert Table 5.8 here

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The model is not supported when using this particular operationalization of the intervention variable.

*All Exact interventions.* Table 5.9 contains the results of this regression with “Calculation of Savings” as the dependent variable.

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Insert Table 5.9 here

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The model is not supported when using this particular operationalization of the intervention.

*All Proxy interventions.* The results of this regression with “Calculation of Savings” as the dependent variable appear in Table 5.10.

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Insert Table 5.10 here

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The model is not supported when using this particular operationalization of the intervention variable.

*All interventions to assist in cases of Generalizations.* Table 5.11 contains the results of this regression with “Calculation of Savings” as the dependent variable.

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Insert Table 5.11 here

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The model is not supported when using this particular operationalization of the intervention variable.

*All interventions to assist in cases of Deletions.* The results of this regression with “Calculation of Savings” as the dependent variable appear in Table 5.12.

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Insert Table 5.12 here

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The model is not supported when using this particular operationalization of the intervention.

## Overview of Interventions and Phenotextuality / Lisibility Results

In no cases were there significant relationships between interventions and the degree of phenotextuality / lisibility.

### Textual selections

This portion of the analysis looks at the choices of teams' textual selections. First, to compare the effects of textual selection across a number of teams, instances where an individual cited material from his or her profile/opening position and goal levels 1, 2, or 3 were counted for the four highest and four lowest profit teams. A table with the raw tabulated data for all eight conversations is first presented. Then the data is presented as pie charts showing how the teams differed in their selection of texts from the exercise. The times at which the eight teams produced these texts is then presented, leading to predictions about the effects of centrifugal and centripetal forces, which are formally tested in the following section.

Table 5.13 indicates the number of lines of dialogue that can be traced back to the speaker's role description sheet in the exercise materials. The data are arranged in order from the highest to the lowest profitability. Conversation 1, analyzed previously, is from the team with a \$92,200 profit, while Conversation II is from the team with an \$82,000 loss.

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Insert Table 5.13 here

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These data indicate that high-performing teams tended to choose to distribute greater amounts of data about their lower level goals, an indication of the greater influence of centripetal forces on the team dynamics. The results are even clearer when one considers the percentages of textual borrowings from each area, as in the pie charts in Figures 5.6 through 5.13.

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Insert Figure 5.6 here

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Insert Figure 5.7 here

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Insert Figure 5.8 here

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Insert Figure 5.10 here

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Insert Figure 5.11 here

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Insert Figure 5.12 here

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Insert Figure 5.13 here

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The data illustrate that, in general, high profitability teams tended to select and distribute greater proportions of text from lower level goals than low profitability teams. The results from the team with a \$85,450 profit and the team with an \$82,000 loss are, however, anomalous. This anomaly is resolved by considering the sequence in which the intertextual borrowings occurred. While some groups are able very quickly to reconcile conflicting voices, most take a rather longer period of time. If the voices of dissent and conflict are not distributed to the team early enough in the exercise to be reconciled, performance will suffer. Figures 5.14 through 5.21 illustrate the order in which the texts from the above charts were distributed. "Level" indicates distributions from Goal Levels One through Three, with distributions from the Profile/Opening Position designated Level 4. "Line Number" indicates the statement number of the interaction within each conversation where the distribution occurred, i.e., how far along the conversation was.

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Insert Figure 5.14 here

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Insert Figure 5.15 here

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Insert Figure 5.20 here

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Insert Figure 5.21 here

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To further highlight the differences between the times that lower level goal information was surfaced, Figure 5.22 compares the time of surfacing Level One information for the seven of the above teams that surfaced this information. (Note that the team which had a \$66,900 loss did not surface any Level One information.) For comparison purposes,

times for all eight conversations were standardized, so each conversation begins at time zero and the last comment in each conversation occurs at time one.

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Insert Figure 5.22 here

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It appears that profitable teams tended to choose to distribute more of their lower level goals and to do so earlier. This might be because more profitable teams experience more centripetal, rather than centrifugal forces in their dialogue. It also appears that when less profitable teams did distribute their lower level goals, the amount of time remaining in the exercise was too short to reconcile the conflicting voices.

These data suggest that an additional analysis might be useful in determining the consequences of centripetal versus centrifugal forces on team performance. An additional analysis could consider the possible effect of the treatment interventions on teams' ability to move toward a unified decision, enhancing centripetal forces toward univocality. These possibilities are pursued in the next section.

## Centripetal / Centrifugal Forces and Performance

As discussed previously, the literature on intertextuality suggests that centripetal and centrifugal forces converge in a dialogue, propelling it either towards a monologic understanding or dispersing it into polyvocality. In order to achieve high profitability, the nature of the exercise done as part of this research required participants to arrive at a monologic decision in the form of agreed-upon salaries, layoffs, and project budget, reconciling conflicts between the various role requirements. This leads to the hypothesis:

Hypothesis 6) Greater centripetal forces lead to higher profitability.

A model illustrating this relationship is shown in Figure 5.23.

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Insert Figure 5.23 here

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If the centripetal forces in a team are strong, it is expected that the team will quickly move toward sharing information that, while it might compromise each individual's own competitive position with regard to his or her team mates, will improve the performance of the team as a whole. On the other hand, if the centrifugal forces in a team are strong, it is expected that the members of a team will withhold information in order to achieve a competitive advantage over the other team members. For this exercise the individual

goal levels, particularly the Level One goals, are especially important in terms of the competitive advantage they confer to the individual team members. The previous analysis of two dialogues illustrate individual choices to either reveal or withhold this information and the effects of these decisions on moving a team toward or away from a unified decision. Thus the time at which goal levels are shared with the team can be used as a measure of the degree to which either centripetal or centrifugal forces dominate. The previous model can thus be operationalized as shown in Figure 5.24.

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Insert Figure 5.24 here

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Operationalization of Variables. Team profitability was measured in the same manner as the previous analysis. The time of goal revelation was calculated by taking each line number where a goal was surfaced and dividing it by the total number of lines in the team's dialogue. In this way an early goal revelation would be a number near zero, while a late goal revelation would be a number near one. Since some teams surfaced multiple goals, both the time of the first goal surfacing and the time of the average goal surfacing were calculated for the analysis. Both the first and average goal surfacing were calculated for Level 1 goals by themselves and for all Level One and Level Two goals. Teams which did not surface any goals were assigned a value of "1" for their average and

first goal surfacing, indicating that they reached the end of the exercise without surfacing any goals.

Analysis of the Model. The model was first tested for the effect of the following operationalizations of “Early Goal Revelation” on team profitability.

1. Time of first goal surfacing using Level 1 goals
2. Time of average goal surfacing using Level 1 goals
3. Time of first goal surfacing using both Level 1 and Level 2 goals
4. Time of average goal surfacing using both Level 1 and Level 2 goals

Since it is possible that results may differ due to the assignment of a value of “1” to teams that did not surface any goals, these four tests are repeated using only teams which surfaced relevant goals. In other words, the first two tests are repeated including only teams which surfaced Level 1 goals and the last two tests are repeated including only teams which surfaced Level 1 and Level 2 goals.

*Time of first goal surfacing using Level 1 goals – all teams.* Table 5.14 shows the results of this regression with “Team Profitability” as the dependent variable.

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Insert Table 5.14 here

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For this operationalization, there is a significant relationship between the time of first goal surfacing and team profitability. R Square is 0.11395.

*Time of average goal surfacing using Level 1 goals – all teams.* The results of this regression with “Team Profitability” as the dependent variable are shown in Table 5.15.

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Insert Table 5.15 here

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For this operationalization, there is a significant relationship between the time of average goal surfacing and team profitability. R Square is 0.10069.

*Time of first goal surfacing using Level 1 and Level 2 goals – all teams.* Table 5.16 shows the results of this regression with “Team Profitability” as the dependent variable.

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Insert Table 5.16 here

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For this operationalization, there is a significant relationship between the time of first goal surfacing and team profitability. R Square is 0.09940.

*Time of average goal surfacing using Level 1 and Level 2 goals – all teams.* The results of this regression with “Team Profitability” as the dependent variable are contained in Table 5.17.

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Insert Table 5.17 here

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For this operationalization, there is a significant relationship between the time of average goal surfacing and team profitability. R Square is 0.09133.

*Time of first goal surfacing using Level 1 goals – teams surfacing Level 1 goals.* Table 5.18 contains the results of this regression with “Team Profitability” as the dependent variable.

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Insert Table 5.18 here

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For this operationalization, there is no significant relationship between the time of first goal surfacing and team profitability.

*Time of average goal surfacing using Level 1 goals – teams surfacing Level 1 goals.* The results of this regression with “Team Profitability” as the dependent variable are shown in Table 5.19.

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Insert Table 5.19 here

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For this operationalization, there is no significant relationship between the time of average goal surfacing and team profitability.

*Time of first goal surfacing using Level 1 and Level 2 goals –teams surfacing L1 and L2.* Table 5.20 shows the results of this regression with “Team Profitability” as the dependent variable.

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Insert Table 5.20 here

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For this operationalization, there is a significant relationship between the time of first goal surfacing and team profitability. R Square is 0.11918.

*Time of average goal surfacing using Level 1 and Level 2 goals –teams surfacing L1,L2.*

Table 5.21 contains the results of this regression with “Team Profitability” as the dependent variable.

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Insert Table 5.21 here

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For this operationalization, there is no significant relationship between the time of average goal surfacing and team profitability.

Results. There is support for the hypothesis that strong centripetal forces contribute to higher profitability when using early goal revelation as a measure of these forces. In five of the eight tests early goal revelations were significantly related to team profitability.

## Interventions and Centripetal / Centrifugal forces

Previous analysis has shown two things. First, there is no significant relationship between interventions designed to surface information and the surfacing of information about goal levels. Second, exact interventions for cases of deletions interact at very near significance with the surfacing of information about Level One goals to increase profitability. It is worth considering whether these interventions increase the centripetal forces pulling the team together toward a unified decision when goal levels are surfaced. Measuring the time at which the Level One goals are surfaced when exact interventions for cases of deletions are applied could provide one measure of this. The question is, given that Level One goals are surfaced, do exact interventions for cases of deletions help the surfacing occur sooner?

This leads to the hypothesis:

Hypothesis 7) Exact interventions for Deletions lead to early Level One goal revelation.

This is modeled as shown in Figure 5.25.

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Insert Figure 5.25 here

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Operationalization of Variables. Both Exact interventions for cases of Deletions and time to average and first Level One goal surfacing were measured in the same manner as they were previously.

Analysis of the Model. A regression was run to calculate the significance of the effect of exact interventions for deletions on the first and average times that Level One goals were surfaced. Only teams that surfaced Level One goals are included in this analysis.

*Exact Interventions for Deletions–Time of First surfacing of Level One Goals.* Table 5.22 shows the results of this regression with “Time of first Level One Goal Surfacing” as the dependent variable.

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Insert Table 5.22 here

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For this operationalization, there is no significant relationship between the time of first goal surfacing and the number of exact interventions for cases of deletions.

*Exact Interventions for Deletions –Time of Average surfacing of Level One Goals.* The results of this regression with “Time of average Level One Goal Surfacing” as the dependent variable are contained in Table 5.23.

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Insert Table 5.23 here

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For this operationalization, there is no significant relationship between the time of average goal surfacing and the number of exact interventions for cases of deletions.

Results. There is no support for the hypothesis that the interventions increase centripetal forces when using early Level One goal revelation as a measure of these forces.

#### Centripetal forces and Surfacing of Information

The last chapter ended with the question, “What leads to greater surfacing?” A reading of the qualitative analysis of the high performing team seems to imply that centripetal forces led to the surfacing of information. It is reasonable to speculate that high centripetal forces, pulling the team together toward a monologic understanding, might increase the amount of information surfaced and shared within the team. This leads to the hypothesis:

Hypothesis 8) High Centripetal forces lead to surfacing of information.

This may be modeled as shown in Figure 5.26.

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Insert Figure 5.26 here

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Using previous operationalizations of the constructs, the model is shown in Figure 5.27.

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Insert Figure 5.27 here

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As in previous analyses, centripetal forces are measured by early goal revelation. This operationalization of the model says that the time at which goals are surfaced is related to the overall number of goals that are surfaced. To prevent confounding data this analysis will only use the time at which the first goal is surfaced by a team rather than the average time that all goals are surfaced for each team. So it is expected that when the first goal is surfaced early in a team dialogue, there will be a larger number of goals surfaced throughout the remainder of the team's conversation.



Operationalization of Variables. Since the time of first goal surfacing used previously was “Time of first Level One goal surfacing”, and “Time of first Level One or Level Two goal surfacing”, these variables will again be used. The relationships between these variables and the number of “Level One” and “Level One and Level Two” goals will be examined. Results are calculated first using only teams which have surfaced such goals, then for all teams with values of “1” used for the time to surface goals in teams which did not surface any goals.

Analysis of the Model. A regression was run to calculate the significance of the effect of early goal revelations on the amount of goals surfaced.

*Time of First surfacing of Level One Goals – teams surfacing Level One.* Table 5.24 contains the results of this regression with “Level One Goal Surfacing” as the dependent variable. Only teams that surfaced Level One goals are included in this regression.

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Insert Table 5.24 here

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For this operationalization, there is a significant relationship between the time of first goal surfacing and the total number of Level One goals surfaced. R Square is 0.38551.

*Time of First surfacing of Level One and Two Goals – teams surfacing L1 and L2.* The results of this regression with “Level One and Two Goal Surfacing” as the dependent variable are shown in Table 5.25. Only teams that surfaced Level One or Level Two goals were included in this regression.

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Insert Table 5.25 here

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For this operationalization, there is a significant relationship between the time of first goal surfacing and the number of goals consequently surfaced. R Square is 0.41950.

*Time of First surfacing of Level One Goals – all teams.* Table 5.26 shows the results of this regression with “Level One Goal Surfacing” as the dependent variable. All teams are included in this regression.

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Insert Table 5.26 here

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For this operationalization, there is a significant relationship between the time of first goal surfacing and the total number of Level One goals surfaced. R Square is 0.64819.

*Time of First surfacing of Level One and Two Goals – all teams.* Table 5.27 contains the results of this regression with “Level One and Two Goal Surfacing” as the dependent variable. All teams were included in this regression.

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Insert Table 5.27 here

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For this operationalization, there is a significant relationship between the time of first goal surfacing and the number of goals consequently surfaced. R Square is 0.68140.

**Results.** There is support for the hypothesis that centripetal forces increase the amount of goal surfacing when using early goal revelation as a measure of these forces.

## SUMMARY OF INTERTEXTUAL FINDINGS

This chapter first summarized the literature on intertextuality. It then described the intertextual dynamics occurring within teams participating in this research. Two conversations illustrated these dynamics in detail, focussing on the choices individuals made when selecting texts from their exercise materials and the interplay between those choices and the forces either driving the team toward a univocal decision or pulling them away to polyvocality. Several quantitative analyses rooted in intertextuality followed.

1) It was found that phenotextuality / lisibility, measured by the number of savings calculated by teams, was related to profitability, but in the opposite direction expected. More calculations of savings resulted in lower overall profitability.

2) There was no relationship between interventions designed to surface information and the degree of phenotextuality / lisibility in the teams' dialogue.

3) A broader contrast was illustrated between four high and four low performing teams, as the choices of text chosen for distribution were compared. The sequence in which the texts were distributed appeared to differ markedly between high and low profit teams. To investigate whether this was the case, a statistical analysis was performed using the average and first times that goal levels were surfaced within the team dialogues as a measure of the centripetal forces pulling the team together toward a monologic decision. There were significant relationships between this measure of centripetal forces and team profitability.

4) The possibility of a relationship between interventions and centripetal forces was explored. There were no significant relationships found.

5) Finally, the question of what leads to surfacing information was explored. It appears that centripetal forces trigger surfacing. Early goal revelation by a team member is significantly related to the overall number of goals surfaced during the entire conversation.

The next and final chapter of this dissertation provides a review of this research and a discussion of the findings. It also addresses practical implications and potential areas for further research.

## CHAPTER 6 –CONCLUSIONS AND DISCUSSION

### OVERVIEW

The purpose of this research was to examine the relationship between interventions designed to surface information and team performance. When individuals come together to be part of a team, one component of group work is the pooling of individual information so that all members can access it. Interventions designed to help individuals surface their information are hypothesized to improve team performance. The objectives of this research are threefold:

1. To test whether the application of these interventions to teams as a treatment improves team performance.
2. To investigate two models describing the relationship between the interventions and team performance.
3. To investigate relationships between phenotextuality / lisibility, interventions, centripetal forces, surfacing, and profit.

Several streams of research form the basis for this study. To begin with, there are certain cognitive barriers people face when they attempt to surface information. When expressing themselves, people tend to generalize, delete, and distort information, leaving much of it tacit. Specific interventions can help people overcome these barriers. Since the development of these interventions is rooted in cognitive linguistic approaches to

therapy, previous research on teams has not explicitly investigated their link to team performance. However, rich qualitative research on team and group interventions includes many examples of their usage, unrecognized heretofore. The interventions used in this research are a component of those in Argyris' Model II behavior. It is therefore anticipated that their insertion into team dialogues will have a degree of the same, performance-enhancing effect attributed to Model II behavior.

When approaching this process from an intertextual standpoint, attention is directed to which texts are selected for distribution to the group, phenotextuality / lisibility, and centripetal vs. centrifugal forces in the dialogue. Centrifugal forces act to pull the dialogue apart toward polyvocality while centripetal forces are at work moving it towards the monologic. The selection and sequence of texts distributed has an important influence on the outcome, and, hence, the performance of the team.

### Hypotheses, Models and Results

The specific hypotheses and models posited for testing in the study follow, along with the results of their analysis.

Hypothesis 1) The profitability of teams treated by interventions to assist in the surfacing of information is significantly higher than teams with no treatment.

Results - The one-tailed t-test analysis indicated a significant difference at the 0.05 level of confidence. The mean profitability of the treatment group was a profit of \$12,305 and the mean profitability of the non-treatment group was a loss of -\$9,157.

Hypothesis 2a) The profitability of teams in the “Externally facilitated – treatment” experimental group is significantly higher than that of teams in the “Internally facilitated – treatment” experimental group.

Results - The t-test analysis indicated no significant difference at the 0.05 or 0.10 level of confidence. The mean profitability of the “Externally facilitated – treatment” experimental group was a profit of \$16,800 and the mean profitability of the “Internally facilitated – treatment” experimental group was a profit of \$9,159.

Hypothesis 2b) The profitability of teams in the “Externally facilitated – treatment” experimental group is significantly higher than that of teams in the “Internally facilitated – no treatment” experimental group.

Results - The mean profitability of the “Externally facilitated – treatment” experimental group was a profit of \$16,800 and the mean profitability of the “Internally facilitated – no treatment” was a loss of -\$9,145. The t-test analysis indicated no significant difference at the 0.05 confidence level. However, the difference was nearly significant at the 0.10 confidence level.



Hypothesis 2c) The profitability of teams in the “Externally facilitated – treatment” experimental group is significantly higher than that of teams in the “Control” experimental group.

Results - The t-test analysis indicated no significant difference at the 0.05 confidence level. However, the difference was significant at the 0.10 confidence level. The mean profitability of the “Externally facilitated – treatment” experimental group was a profit of \$16,800 and the mean profitability of the “Control” experimental group was a loss of -\$9,164.

Hypothesis 2d) The profitability of teams in the “Internally facilitated – treatment” experimental group is significantly higher than that of teams in the “Internally facilitated – no treatment” experimental group.

Results - The t-test analysis indicated no significant difference at the 0.05 level of confidence. However, the difference was nearly significant at the 0.10 confidence level. The mean profitability of the “Internally facilitated – treatment” experimental group was a profit of \$9,159 while the mean profitability of the “Internally facilitated – no treatment” experimental group was a loss of -\$9,145.

Hypothesis 2e) The profitability of teams in the “Internally facilitated – treatment” experimental group is not significantly higher than that of teams in the “Control” experimental group.

Results - The mean profitability of the “Internally facilitated – treatment” experimental group was a profit of \$9,159 while the mean profitability of the “Control” experimental group was a loss of -\$9,164. The t-test analysis indicated no significant difference at the 0.05 significance level. However, the difference was significant at the 0.10 confidence level.

Additionally, the research investigated two models for the relationship between interventions to aid in the surfacing of information, surfaced information, and team performance.

Hypothesis 3a) Surfaced information acts as a mediator between interventions to surface information and team performance.

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Insert Figure 6.1 here

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Results - Regressions investigating the mediating relationship do not support it when either using treatment versus non-treatment to indicate instances of interventions, nor when the counts of interventions are used as a measure of instances of interventions. In both cases there are no significant relationships between instances of interventions and individual information surfaced. However, given the limitations of the sample, nature of the interventions, setting, and task, this model could provide avenues for further research.

Hypothesis 3b) Surfaced information acts as a moderator between interventions to surface information and team performance. (As shown in Figure 6.2)

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Insert Figure 6.2 here

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Results - Regressions investigating the moderating relationship do support the moderating model when it includes Surfaced Level 1 goals and Exact Interventions to deal with Deletions.

Hypothesis 4) Greater phenotextuality / lisibility leads to higher profitability. (As shown in Figure 6.3.)

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Insert Figure 6.3 here

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Results – Regressions investigating this relationship reveal that phenotextuality / lisibility, measured by the number of savings calculated by teams, was significantly, but negatively, related to profitability. Curiously, more calculations of savings resulted in lower overall profitability.

Hypothesis 5) Interventions lead to greater phenotextuality / lisibility. (As shown in Figure 6.4.)

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Insert Figure 6.4 here

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Results – Regressions investigating this model no significant relationships between interventions designed to surface information and the degree of phenotextuality / lisibility in the teams' dialogue.

Hypothesis 6) Greater centripetal forces lead to higher profitability. (As shown in Figure 6.5.)

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Insert Figure 6.5 here

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Results – Regressions investigating this model show significant relationships between the measure of centripetal forces and team profitability.

Hypothesis 7) Exact interventions for Deletions lead to early Level One goal revelation. (As shown in Figure 6.6.)

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Insert Figure 6.6 here

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Results – Regressions investigating this model found no significant relationship.

Hypothesis 8) High Centripetal forces lead to surfacing of information. (As shown in Figure 6.7.)

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Insert Figure 6.7 here

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Results – Regressions indicate that the measure of centripetal forces, early goal revelation by a team member, is significantly related to the overall number of goals surfaced during the entire conversation.

## DISCUSSION AND IMPLICATIONS

The findings from the comparison of treatment versus non-treatment groups support the hypothesis that treatment with interventions to deal with generalizations, deletions and distortions improves the performance of teams involved in this research. The asking of questions designed to surface information does not lead to greater surfacing of information, and then higher performance. Instead, quantitative results from the intertextual indicate that centripetal forces trigger the surfacing of information. However, when the surfacing of information occurs, the specified interventions interact with the surfacing to produce higher performance.

The qualitative portion of the intertextual analysis illustrates this process by examining how team members choose from the texts available to them. While teams may begin with the members making choices from the available text that support their own

individual goals, high performing teams are able to reduce the centrifugal forces pulling them apart, resolve the conflicts between voices, and move toward a univocal decision governed by the centripetal forces pulling the team together. High performing team members began choosing to distribute conflictual portions of texts earlier than low performing teams. Considering the rigid time constraints of the exercise, this allowed the high performing teams time to work toward resolving the conflicts and improve team profitability.

### Discussion

In the writer's opinion, these data indicated that interventions to deal with deletions, distortions, and generalizations are an effective means to improve team performance. This is particularly true when there are 1) time constraints under a heavy workload, 2) the situation is complex and ambiguous, and 3) individuals need to pool their information to achieve a group goal. The following paragraphs address these points.

The exercise allowed forty minutes for the team to share information, negotiate conflicts, and arrive at a decision. While the amount of time severely limited, there was also a great deal of information that the teams had to share, reconcile, and use to reach a decision.

Not only did the participants in this research find themselves facing a situation where a great deal of information was available but there was no obvious solution. It was

difficult to ascertain which portions of the materials available to the team were important and which portions were not important. These conditions are similar to those faced by knowledge workers. To perform effectively in such situations, the team must both surface the information that the members possess and bring to light the reasoning underlying their actions. The types of interventions proposed in this research are designed to assist teams in both these areas.

Under such conditions of ambiguity, it was especially important that as much information as possible be shared for the team to achieve an effective solution. Though the exercise was essentially a linear optimization problem, each of the participants had only pieces of the information needed to create the most profitable solution. The sharing of information was particularly problematic since all communication was electronic, a lean media. It may be that the effects of the interventions were accentuated by operating in an environment that is especially difficult.

Centripetal forces pulling a team toward a consensual, mutually beneficial outcome are extremely important for high performance. Yet, even when individuals are committed to working together as a team, the transmission of information between team members may be difficult. Cognitive processes of deletion, distortion, and generalization are reflected in speech, and make it hard for individuals to adequately verbalize, and thus share, information that may be critical to team success. The interventions investigated in this study may give individuals greater ability to surface information. The measure of information surfaced captured only a part of the information passed between individuals.



Some support for these implications can be found in research in the emerging field of "Naturalistic Decision Making" (NDM). This field addresses (Orasanu & Connolly, 1993) decisions involving one or more of the following:

- ill-structured problems
- uncertain, dynamic environments
- shifting, ill-defined, or competing goals
- multiple event-feedback loops
- time constraints
- high stakes
- multiple players
- organizational norms and goals that must be balanced against the decision makers' personal choice.

Research in this field notes that attention to team communication processes is important for effective performance under these conditions, and suggests that training interventions be developed and tested to improve communication (Urban, J.M. et al,1996). Relating this to the qualitative analysis in this work, the actions of a leader who directs the team process while being sensitive to individual needs seems to be an important ingredient for success.

Even if team members have the ability to share information, they may not have the desire to do so. For these interventions to be useful, team members had to also be willing to share information that could have a negative effect on the attainment of their own

individual goals. Interventions that ask for individuals to supply information when they are not willing to do so will most likely to be fruitless. To put it in Action Science terminology, the mere use of "recipes" for action is not sufficient. To do well in this particular exercise, the members of the team must also adopt governing values that subordinate their individual goals of "winning" a higher goal level to the larger team goal of maximizing profitability. Expressing this in intertextual terms, for a team to do well the team members had to select texts which had to do with maximizing the benefit to the team, rather than themselves as individuals. Indeed, one can look at "governing values" as an accretion of texts that individuals have absorbed over a lifetime, until they become tacit guides to action.

Individual willingness to subordinate their individual goals or answer questions from the interventionist may be gauged by examining whether the answers given seem evasive or incomplete. From the intertextual perspective, one solution to this might be to expose individuals to texts involving teamwork to achieve group goals.

#### Potential issues in this research

Several factors might restrict the findings of this study. They have to do with the interventionist's knowledge of the exercise, the pseudo-randomness of team assignments, the potential for participants "leaking" information about the exercise to those who have not yet taken part in it, and the use of student participants.

The writer served as both researcher and interventionist in this study. As a result, there is a possibility that the interventions generated for the "Externally Facilitated - Treatment" experimental group may have been unintentionally leading. While the researcher attempted to follow the intervention protocol scrupulously, it was not possible to act on all the opportunities for intervention. Consequently, the interventionist was often in the position of choosing between several potential interventions. It is possible that interventions that had the potential for leading to greater profit were unconsciously chosen. This potential may be eliminated by the use of several interventionists randomly assigned to the "Externally Facilitated - Treatment" experimental group throughout the course of the study. If interventionists are also kept unaware of the structure of the exercise this potential would be minimized.

Another potential problem arose from the fact that the teams were not assigned to experimental groups truly randomly. To a large part, this was a result of the use of university students, with both scheduling conflicts and at times inconsistent motivation to participate in the research. Whenever only a partial team showed up, or a team did not show up at all, the schedule had to be revised on the fly. This eliminated the randomness of team assignments and may have had an effect on the overall results. The problem could be mitigated by providing greater incentives for teams to participate, possibly through cash payments for participation, as well as by greater flexibility in scheduling sessions to meet team needs.

Because the exercise was set up as a competition between teams, there was an incentive for teams to keep the details of the exercise secret from those who had not yet

participated. However, this incentive did not work perfectly, since there was some mention of having spoken to others about the strategy for winning in the captured team conversations. This may have improved the performance of teams later in the study. Every effort was made to minimize this, by, for example, having a mixture of teams from the various experimental groups in each session so that any trend should randomly affect all experimental groups. But the potential for influence remains. One solution to this problem would be to select teams from a larger population that was not so closely linked as the students at a single University. The social distance between individuals would help prevent any instances of sharing strategy.

Finally, the use of student participants is itself problematic should one wish to make generalizations about the results of a study to a different population. Though university students are a very convenient population to research, they do not have much experience in working together as a team to solve business problems of this nature. It was clear that some students lacked an understanding of how to calculate profit when given the budget sheet detailing revenues and costs. Recognizing these considerations, it might be preferable to use a different population for research.

### Practical Implications

This research tested the effects of operationally defined interventions on team performance and found a significant positive treatment effect. One of the major strengths of this research is that the interventions are both simple and defined clearly enough that

an individual should be able to put them into practice with a minimum of training. Teams are of growing importance in organizations, particularly teams of knowledge workers. Consequently, simple, easily learned techniques that can help them share information and work together more effectively are potentially of great benefit. It is easily possible for an individual to learn the most common interventions in the space of less than an hour. With such low costs, even small improvements in team performance could conceivably result in a large cost/benefit ratio. The results from this study indicated that the interventions effectively improved performance in the context of time constrained, ambiguous problems where there were competing goals and individuals needed to share information for the team to perform well. It is often especially difficult for teams to perform well under these conditions. A significant contribution to practice will have been made if the results of this study are generalizable to teams working on other problems in a similar context. Some examples of teams working in similar contexts include:

- multifunctional engineering teams comprised of members from separate disciplines working in new product development
- management teams with members from various functional areas working on pressing business issues
- project teams or task forces addressing implementation of new technologies.

## SUGGESTIONS FOR FURTHER RESEARCH

The results of this study suggest potential avenues for further research. The main findings driving these suggestions arise from two general areas. First, from the intertextual analysis it appears that the presence of internal competition within the teams significantly affects the inclination of team members to surface their lower level goals. The declaration that the prize would be distributed according to relative attainment of goal levels is one source of this internal competition, and seems to contribute to the centrifugal forces pulling the team apart. Second, from the moderating model describing the relationship between interventions, surfaced information, and team performance, it is apparent that high performance is a result of the interaction of interventions and surfaced information. These findings suggest two questions. First, would varying the structural competition within a team have an effect on the team members' inclination to surface goals? Second, would other methods designed to encourage goal surfacing have an effect on performance? Each of these questions will be addressed separately.

Regarding the first question, one approach is to include variation in structural competition in the experimental design. Telling some teams that if they win the prize the money will be distributed by relative goal attainment (as this study did) could do this. Other teams could be told that if they win the money it would be distributed evenly among team members. It would be expected that the group without the structural internal competition would experience greater centripetal forces and thus be more likely to surface their information and achieve higher profitability. Under these circumstances, it would also be expected that interventions to facilitate information surfacing would be

more effective. That is to say, that among teams without internal competition, those treated with interventions would tend to perform better than those without treatment.

Regarding the second question, since the interaction between surfacing information and interventions results in team performance, surfacing information is the uncontrolled variable. Interventions can be administered to the team at will, the question is how to incite people to surface their goals so that the power of these interventions can be put to use. There are at least three possible avenues that can be explored as a possible solution. One might be termed the "forced solution". Team members could be instructed to share their goals at the beginning of the exercise. The application of this approach would be especially interesting if it were combined with internal, structural competition, as described earlier.

"Team building" is another potential approach, springing from the observation that centripetal forces encourage the surfacing of goals. This is suggested (and amplified) by Bohm's (1998) relational approach to dialogue, and is a possible means (Tan, et al, 2000) to improve team performance. In this approach, time is set aside at the beginning of the exercise for team members to chat and build trusting relationships. These relationships might act to foster goal sharing, counteracting internal competition and the inclination to put individual goals ahead of team goals. The relationship to sharing information to other factors such as culture, group roles, leadership, etc., could also provide interesting avenues for further research.

Based on an intertextual perspective, a third potential approach would be to expose team members to texts involving goal sharing and/or achievement of team goals. Once

exposed to such texts, they would be available for team members to select and act upon. Related to this, the interventions used appeared to be borrowed and used by group members other than the interventionist / facilitator. It would be interesting to check for such contagion effects among the members of a team and investigate possible relationships to team performance.

I feel that I have only touched upon a few of the many possibilities for future research using the perspectives applied in this work. Hopefully these avenues will not only offer interesting and challenging future research, but also contribute to the benefit of humanity.



## FIGURES

FIGURE 3.1

The Mediating Model

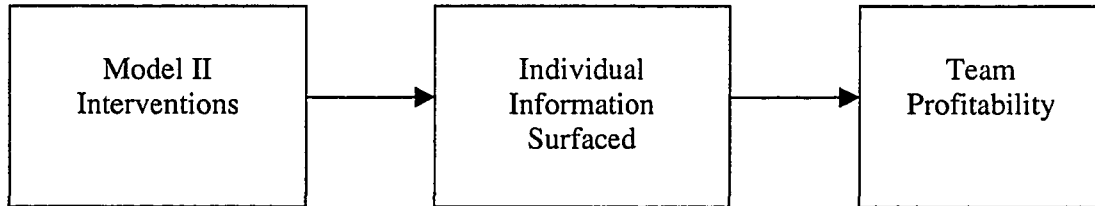




FIGURE 3.3

Computer Room

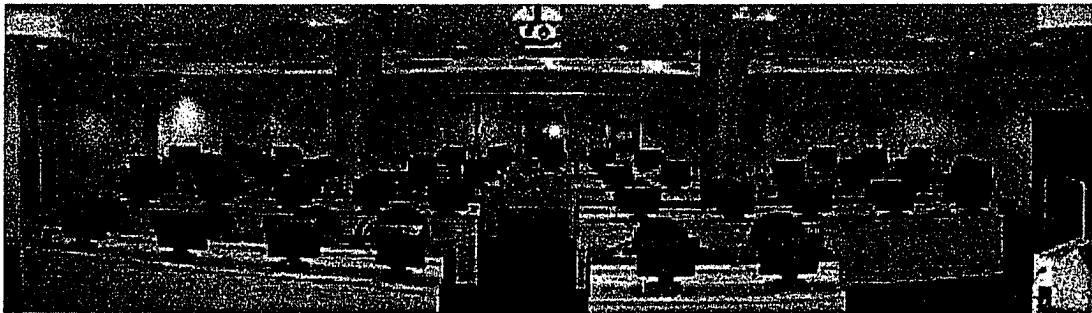


FIGURE 3.4

Worksheet for Calculating Performance

	A	B	C	D	E	F	G	H	I	J
1	Department	Line Items	Units	Per unit exp.	Expenditures	per unit rev.	Revenues	Net Results		
2	Development	Director	1	\$45,000	\$45,000	0.05	\$6,000			
3	Development	Managers	3	\$25,000	\$75,000	0.05	\$18,000			
4	Development	Projects	1	\$120,000	\$120,000	1	\$144,000			
5	Finance	Director	1	\$30,000	\$30,000	\$20,000	\$20,000			
6	Finance	Managers	3	\$25,000	\$75,000	\$20,000	\$60,000			
7	Personnel	Director	1	\$30,000	\$30,000	\$0	\$0			
8	Personnel	Managers	2	\$25,000	\$50,000	\$15,000	\$30,000			
9	Personnel	Employees	100	\$18,000	\$1,800,000					
10	Sales						\$2,015,000			
11					\$2,225,000		\$2,269,000	\$44,000		
12										
13	Wage cuts	% out	> emps?	zero?	AND of two			Flags		
14	Dev. Director	10	1	1	TRUE			0 Dev: At least 95 reg emps		
15	Dev. Mgrs.	16.666666	0	1	FALSE	Total savings	\$304,000	0 Dev: At least one mgr in Dev		
16	Fin. Director	40	0	1	FALSE			0 Dev: Retain Dev Dir position		
17	Fin. Mgrs.	16.666666	0	1	FALSE			0 Dev: Dev Dir gets at least 35K		
18	Pers. Director	40	0	1	FALSE			0 Dev: Budget surplus goes to projects		
19	Pers. Mgrs.	16.666666	0	1	FALSE			0 Fin: Retain Fin Dir position		
20	Pers. Empls.	10						0 Fin: Retain one Fin mgr		
21								0 Pers: Retain Pers Dir position		
22		keeping	Lose 5 or less					0 Pers: Retain at least 3 mgrs total		
23			1	1				1 UR: Retain either all 100 jobs with less than		
24								0 General: min mgrs salaries are 25K		
25		as is		44000				0 General: Min dir salaries are 30K		
26		fixed		22000	emp sals			0 General: Max project increase is 20K		
27								1 General: Mgrs and Dir's must accept a greater		
28										
29										
30										
31										

FIGURE 4.1

Mediating Model

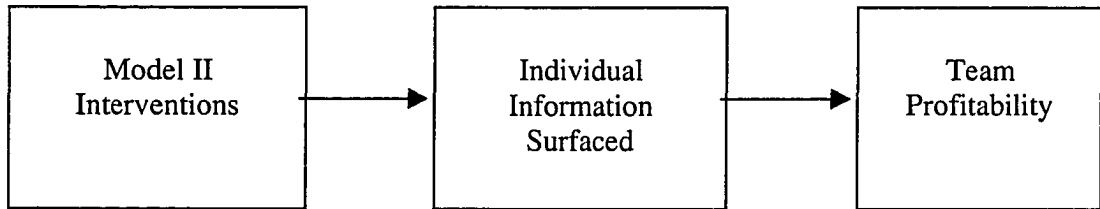


FIGURE 4.2

Moderating Model

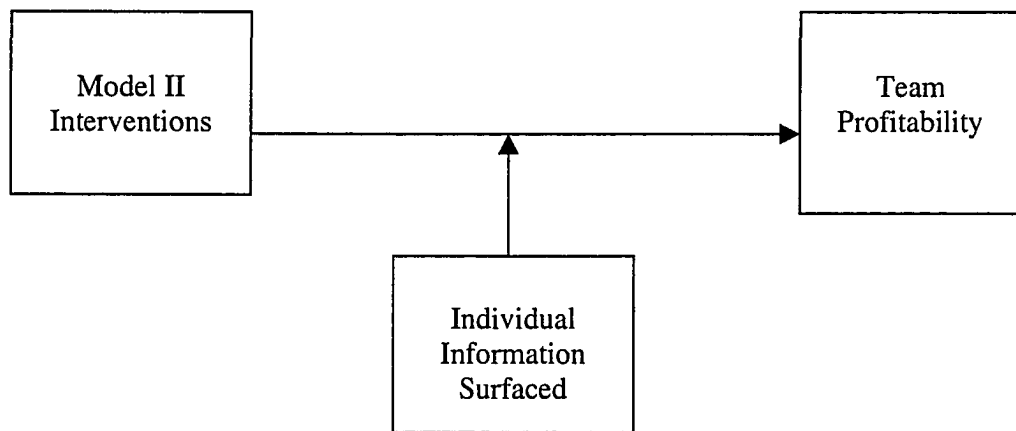


FIGURE 4.3

Mediating Model for Additional Analysis

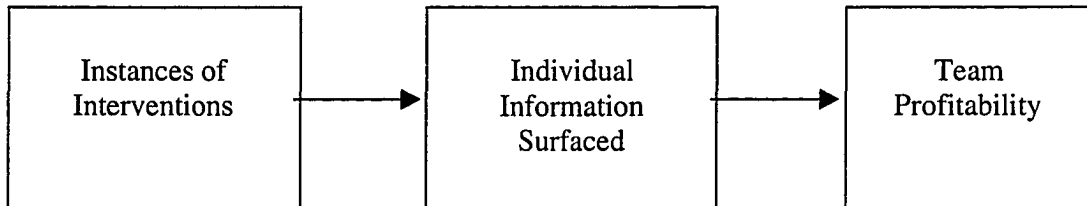




FIGURE 4.4

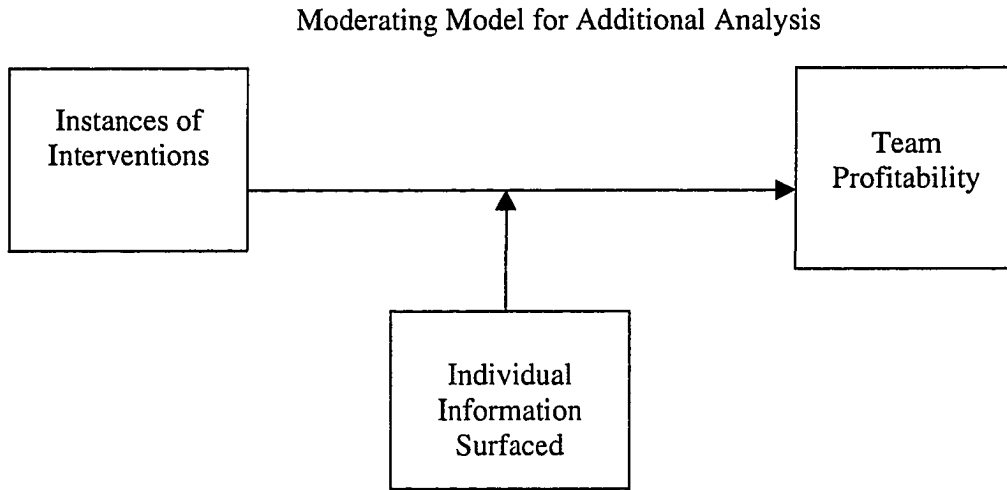


FIGURE 5.1

Phenotextuality / Lisibility leads to Profitability

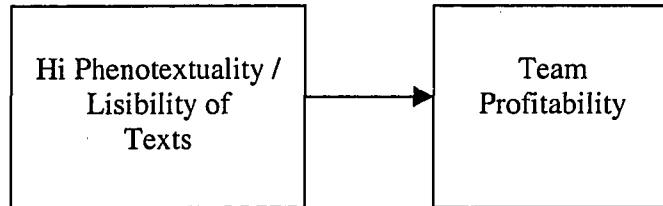


FIGURE 5.2

Savings Calculations lead to Profitability

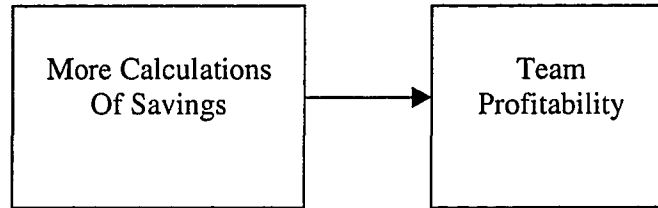


FIGURE 5.3

Model II interventions lead to greater Phenotextuality / Lisibility

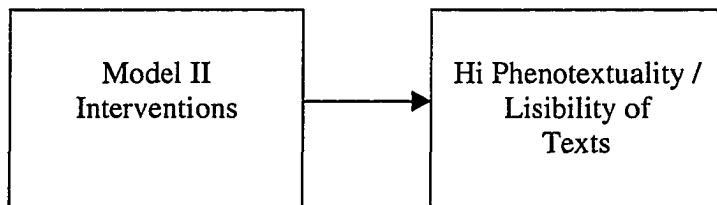


FIGURE 5.4

Model II treatments lead to more calculations of savings

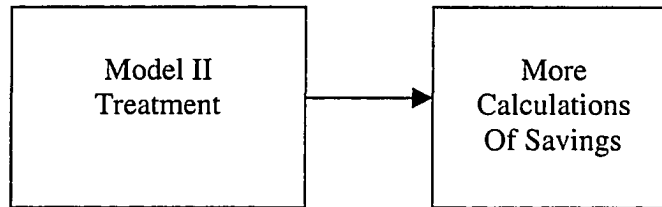


FIGURE 5.5

Instances of Interventions lead to Savings Calculations

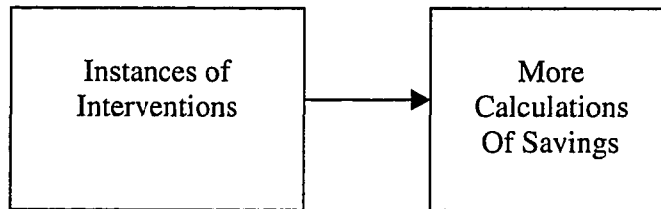


FIGURE 5.6

Sources of Dialogue for \$136,000 Profit Team

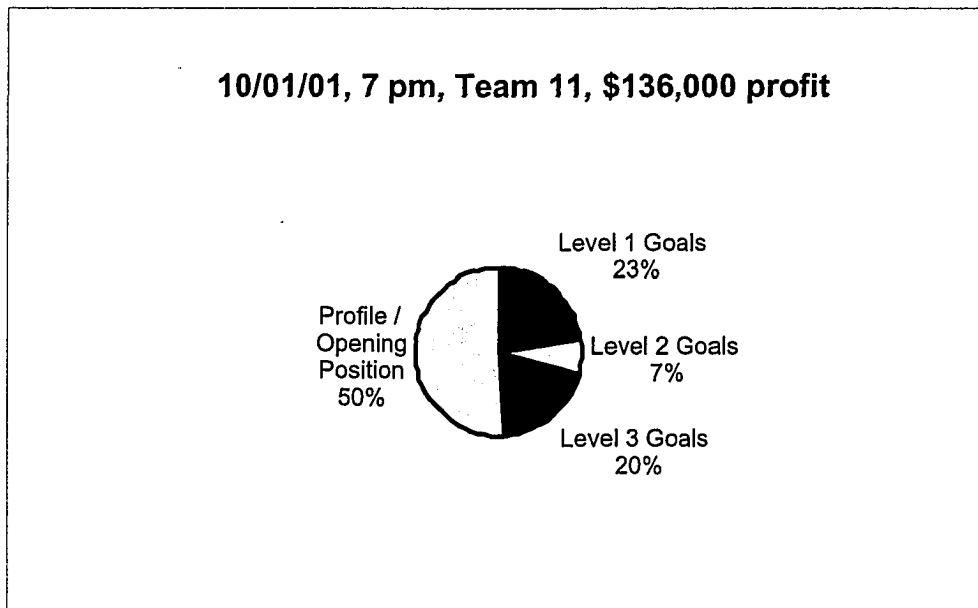


FIGURE 5.7

Sources of Dialogue for \$129,000 Profit Team

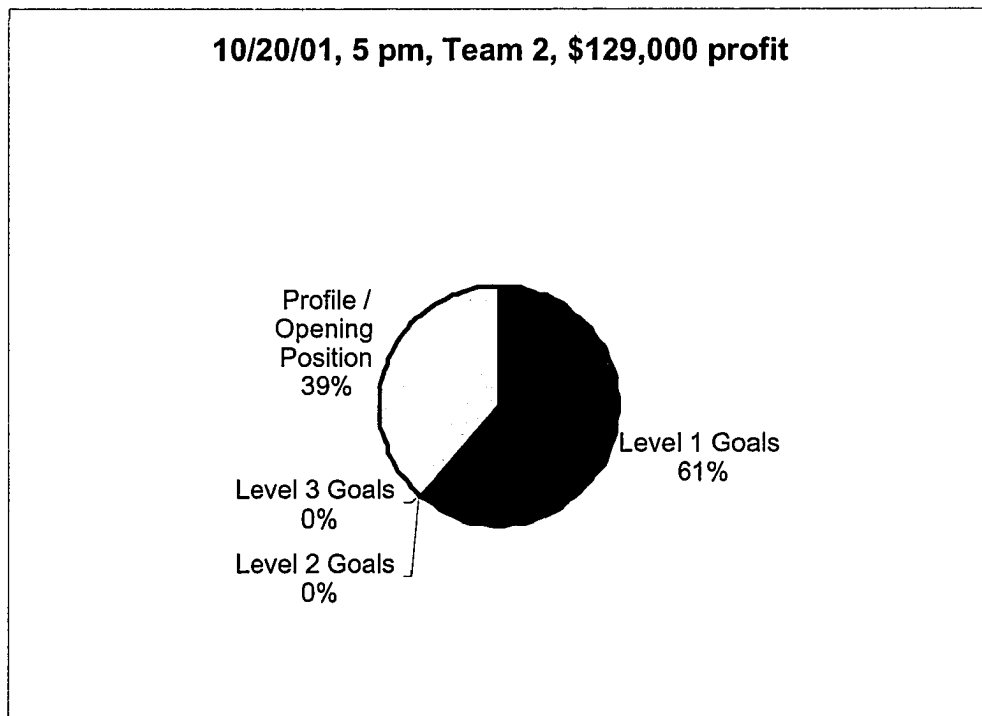




FIGURE 5.8

Sources of Dialogue for \$92,200 Profit Team

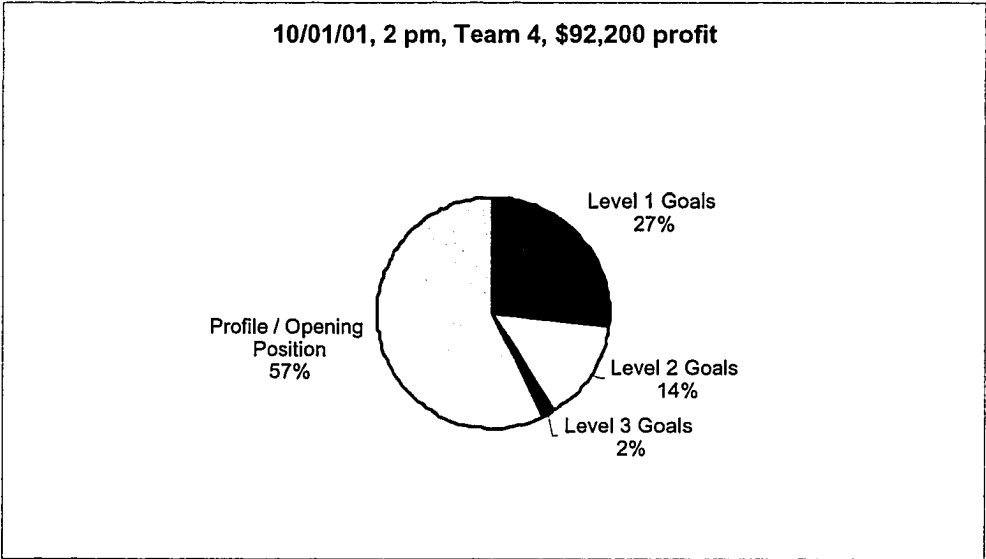


FIGURE 5.9

Sources of Dialogue for \$85,450 Profit Team

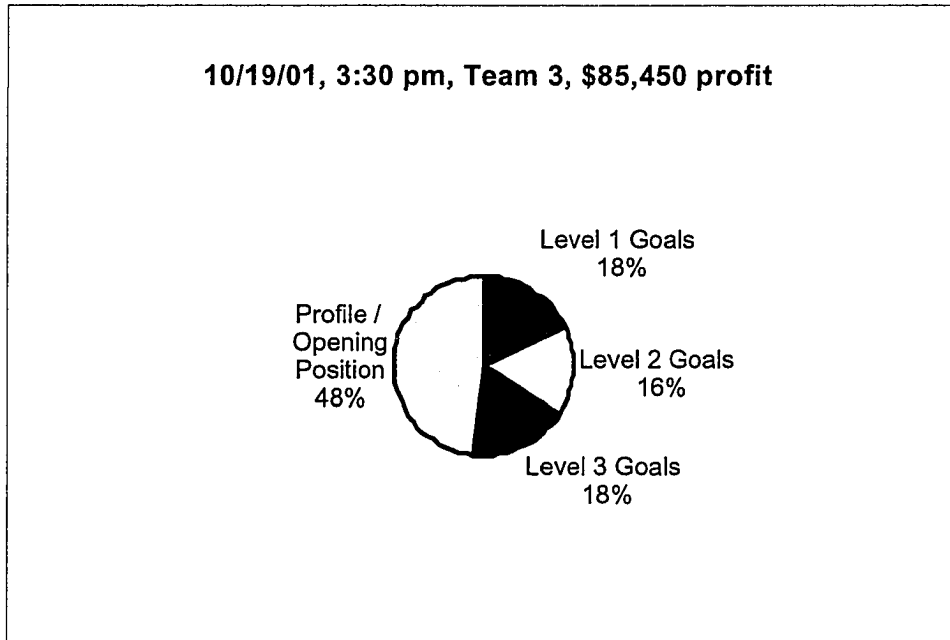


FIGURE 5.10

Sources of Dialogue for \$66,900 Loss Team

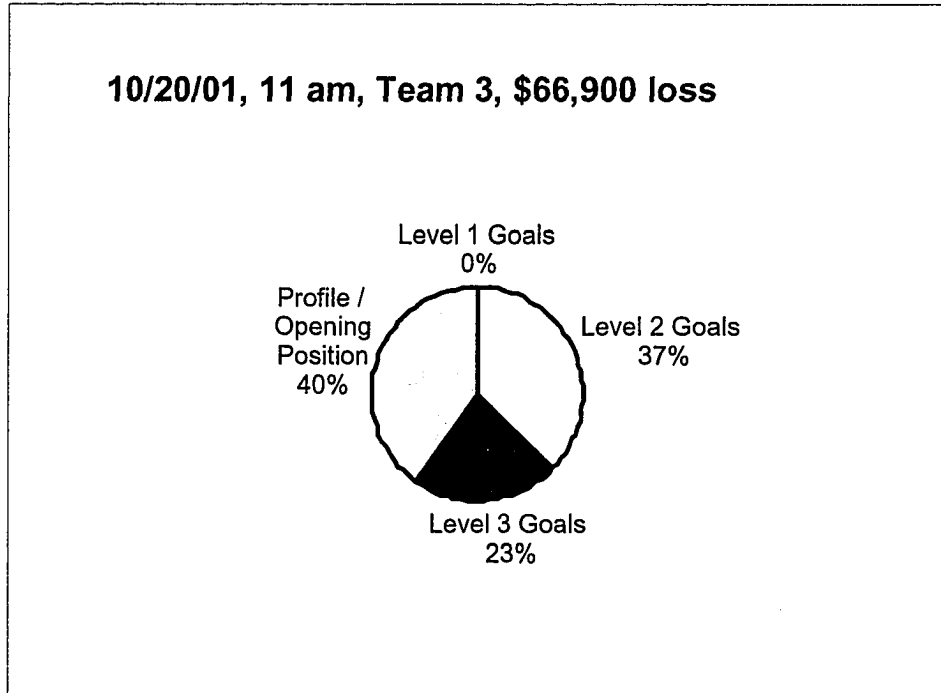


FIGURE 5.11

Sources of Dialogue for \$82,000 Loss Team

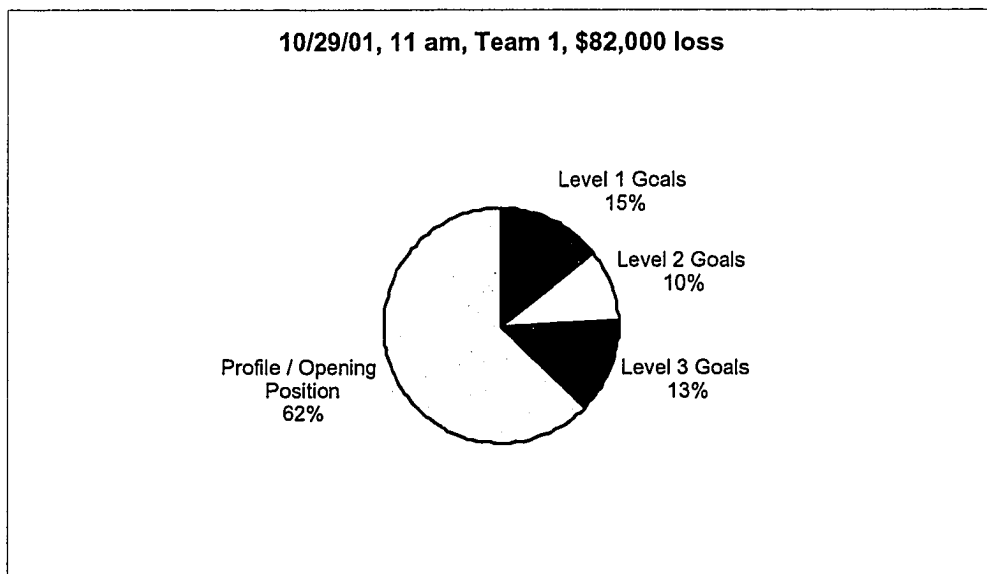


FIGURE 5.12

Sources of Dialogue for \$94,780 Loss Team

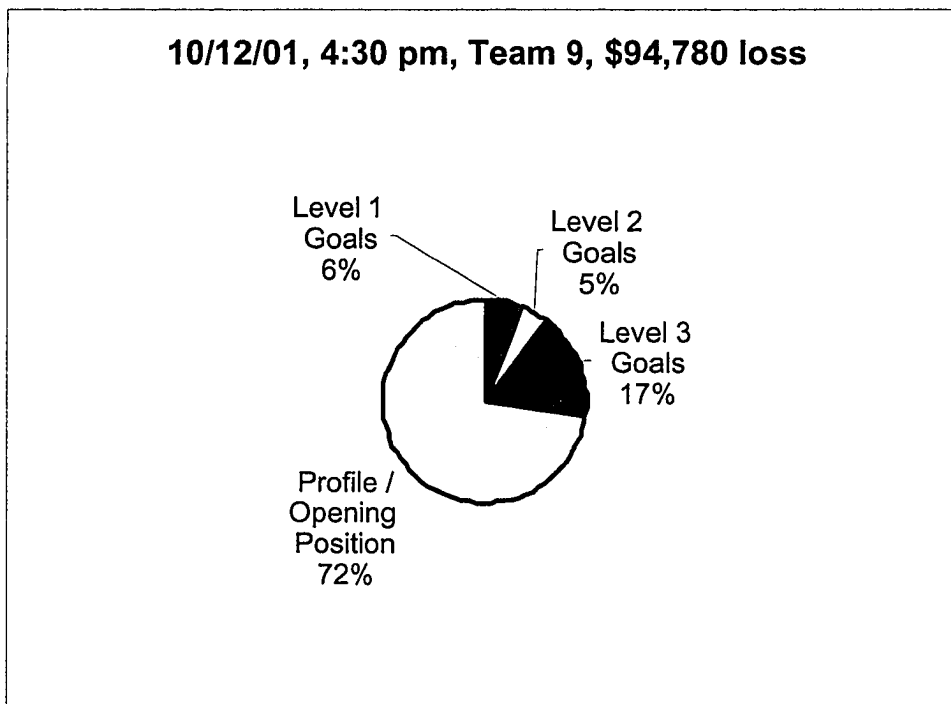


FIGURE 5.13

Sources of Dialogue for \$107,000 Loss Team

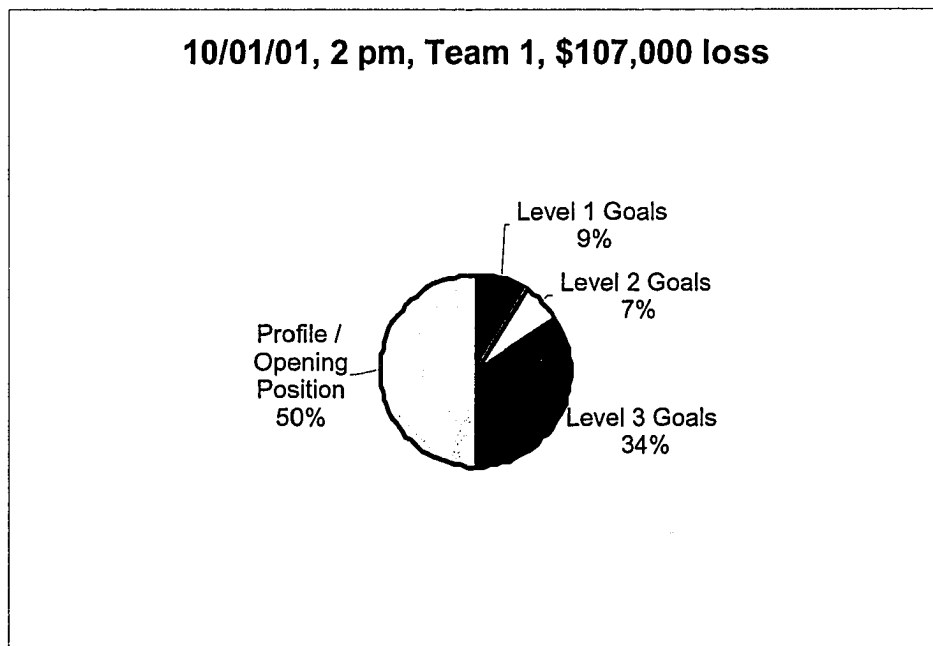


FIGURE 5.14

Sequence of Intertextual Borrowings for \$136,000 Profit Team

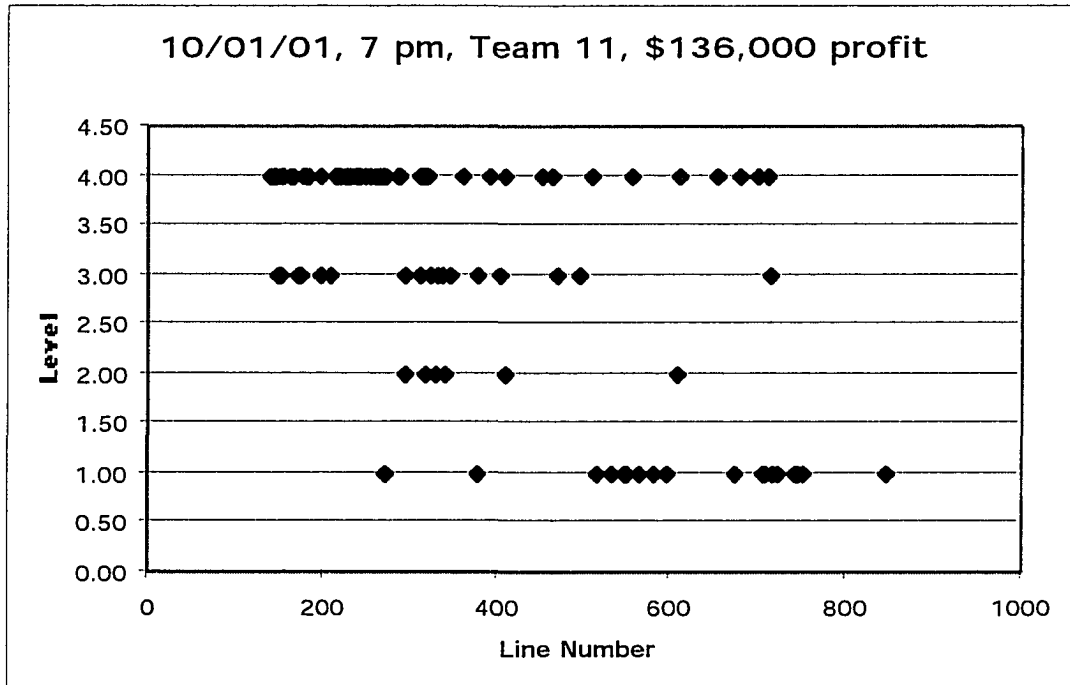


FIGURE 5.15

Sequence of Intertextual Borrowings for \$129,000 Profit Team

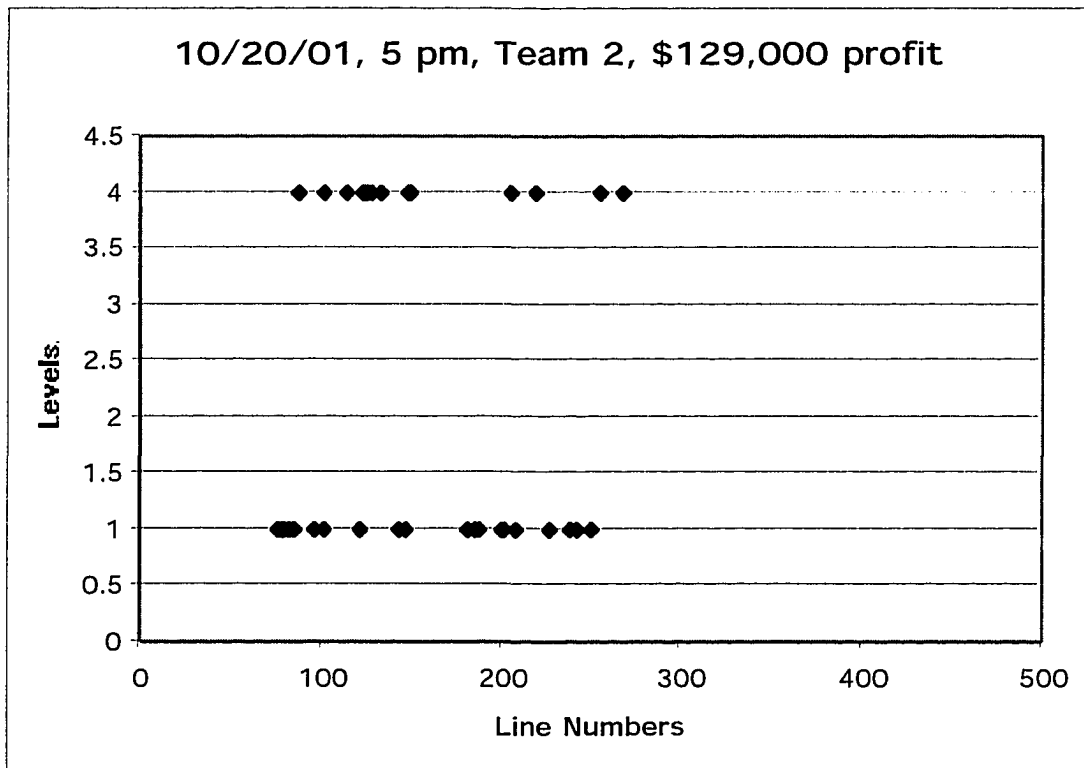




FIGURE 5.16

Sequence of Intertextual Borrowings for \$92,200 Profit Team

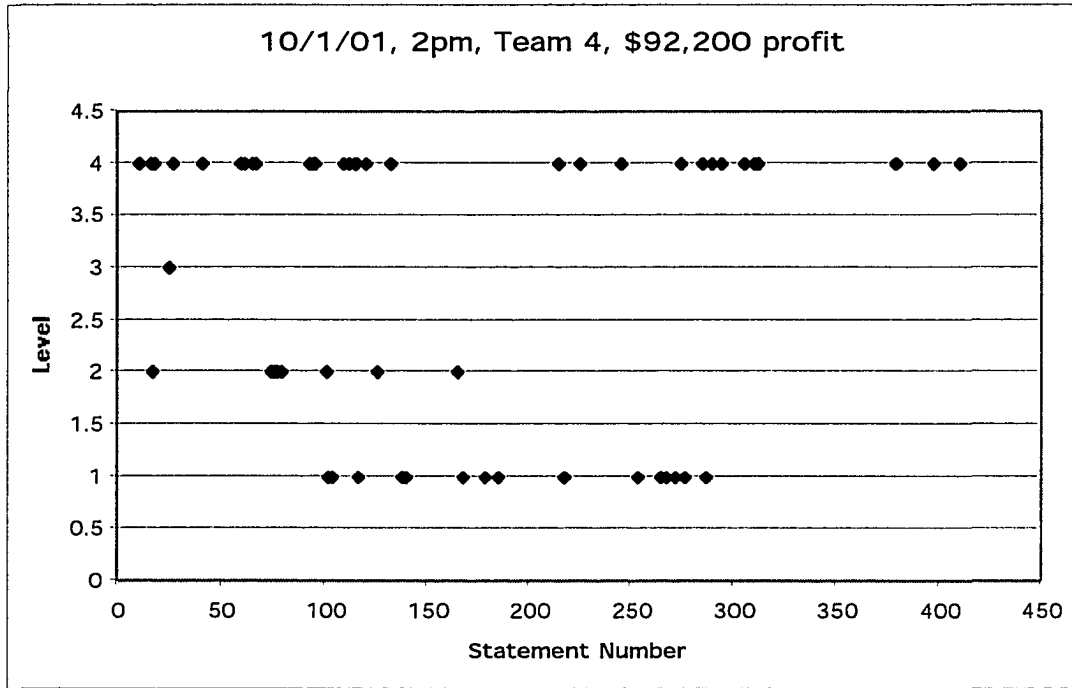


FIGURE 5.17

Sequence of Intertextual Borrowings for \$85,450 Profit Team

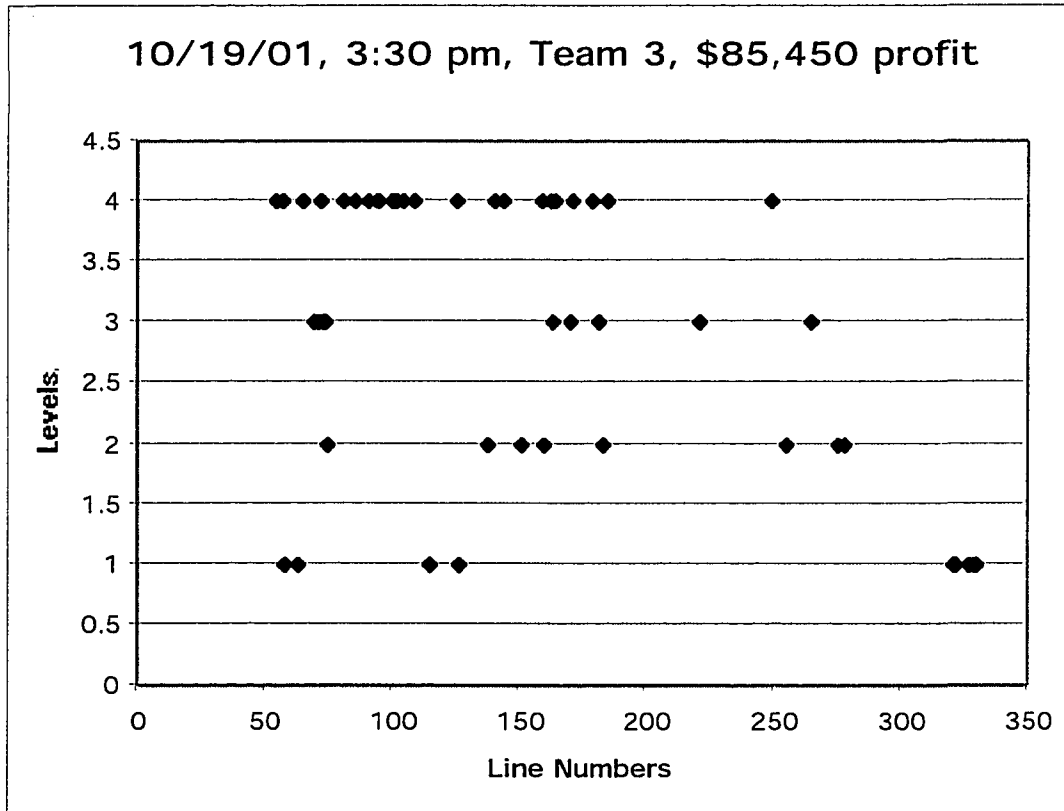


FIGURE 5.18

Sequence of Intertextual Borrowings for \$66,900 Loss Team

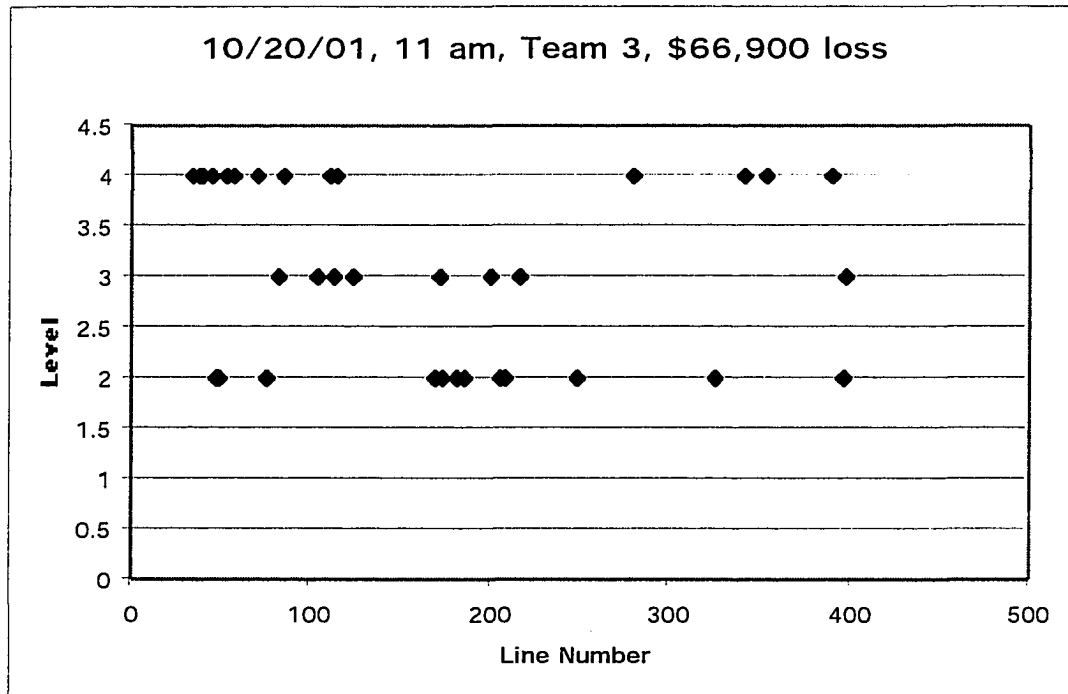


FIGURE 5.19

Sequence of Intertextual Borrowings for \$82,000 Loss Team

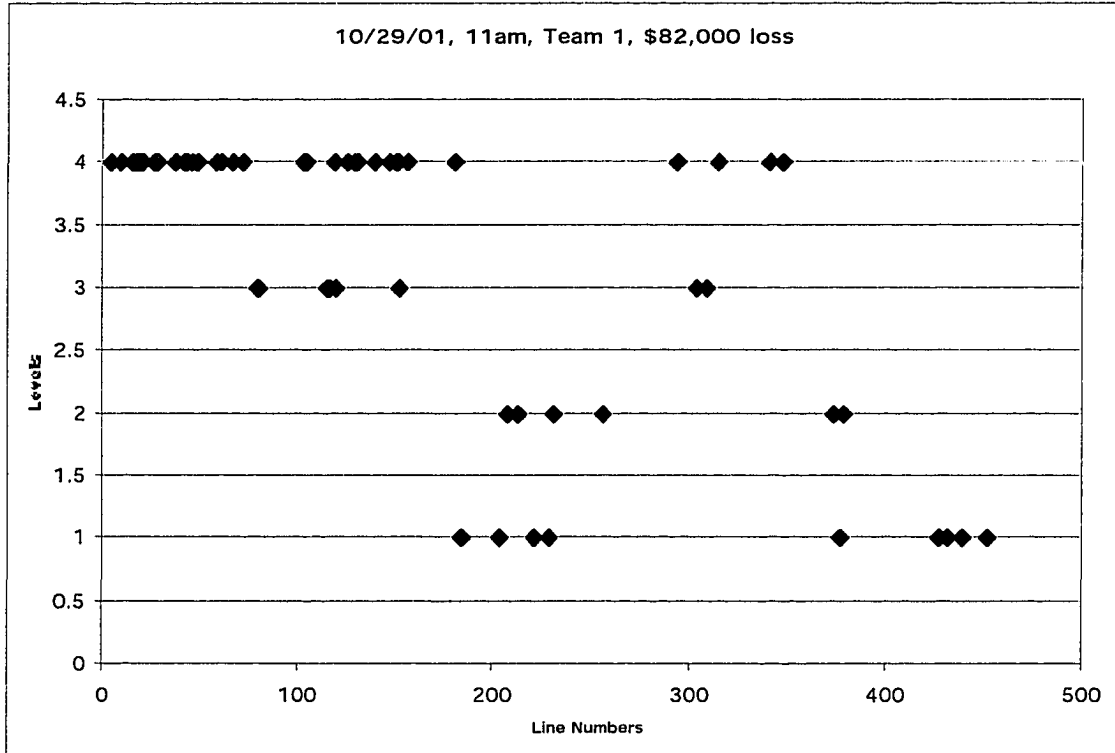


FIGURE 5.20

Sequence of Intertextual Borrowings for \$94,780 Loss Team

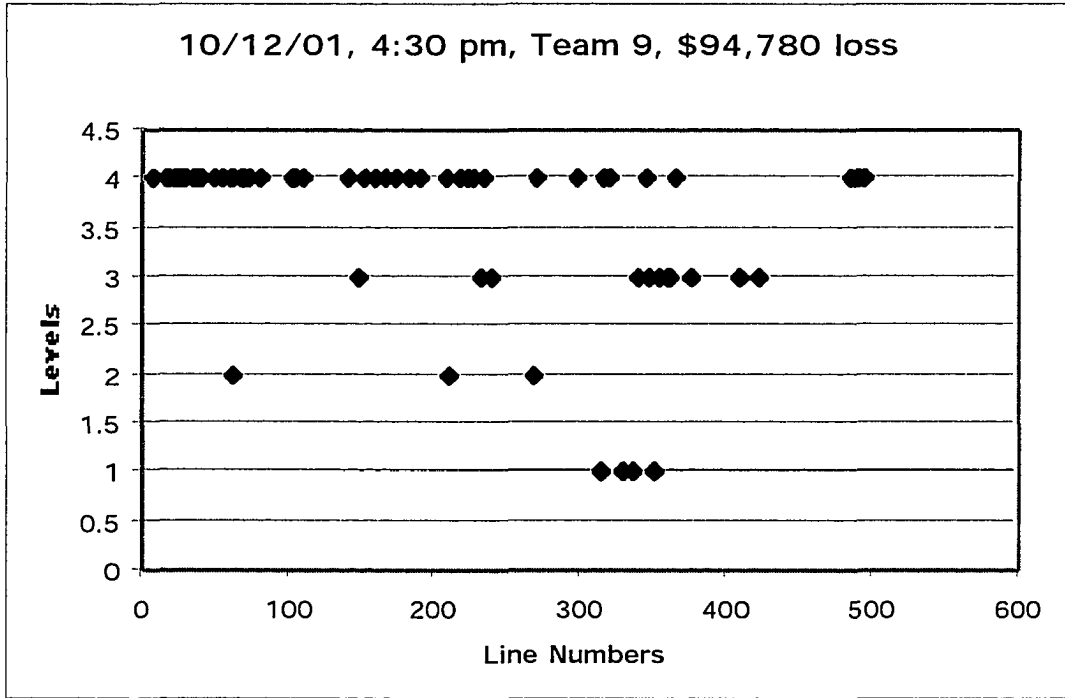


FIGURE 5.21

Sequence of Intertextual Borrowings for \$107,000 Loss Team

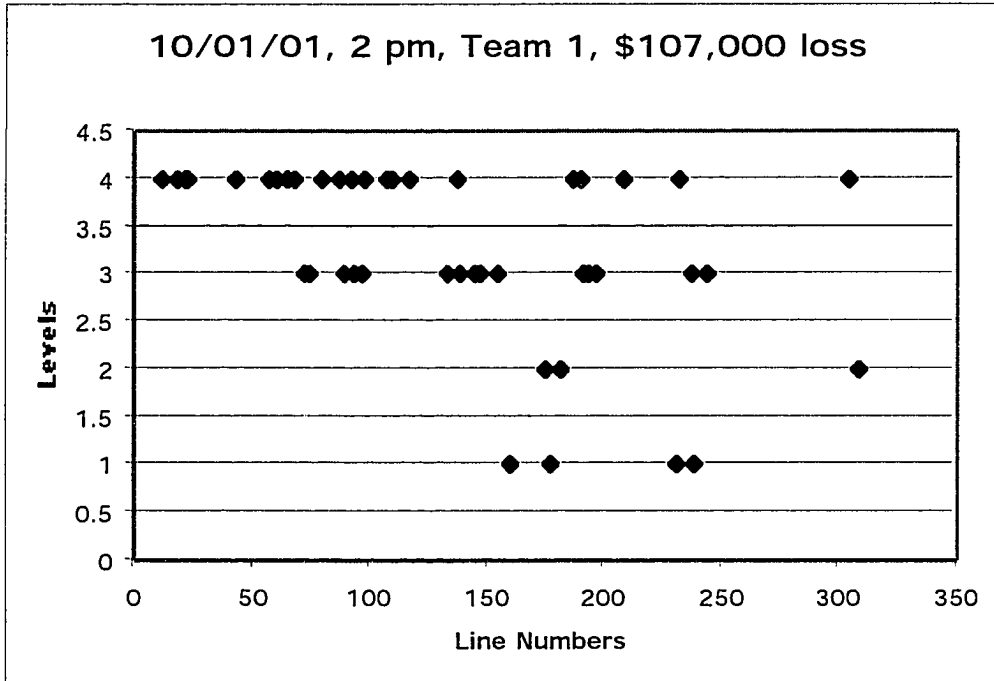


FIGURE 5.22

Comparison of Time of Level One Information Surfacing

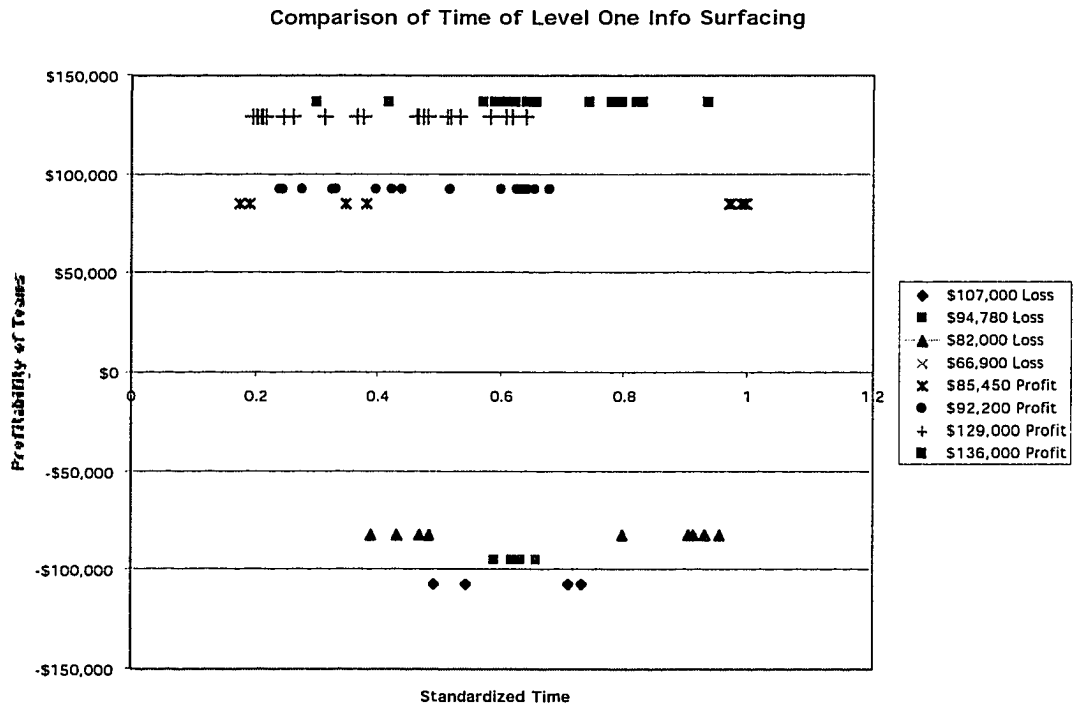


FIGURE 5.23

High Centripetal forces lead to Team Profitability

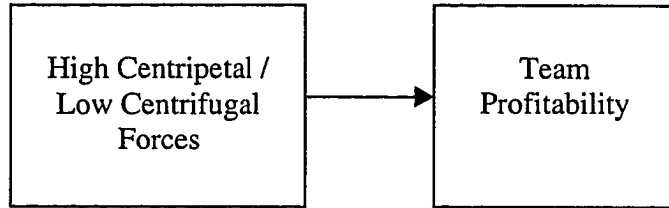




FIGURE 5.24

Early Goal Revelation leads to Team Profitability

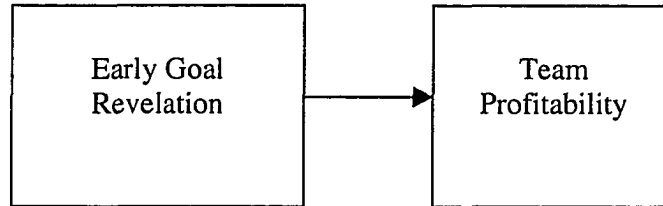


FIGURE 5.25

Exact Interventions for Deletions lead to early Level One Goal Revelation

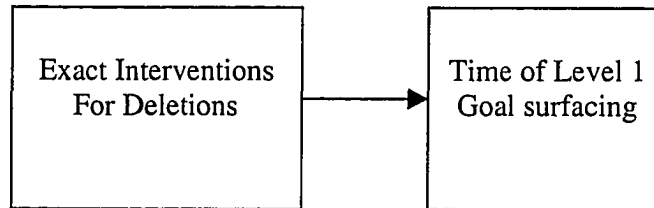


FIGURE 5.26

High Centripetal forces lead to surfacing of information

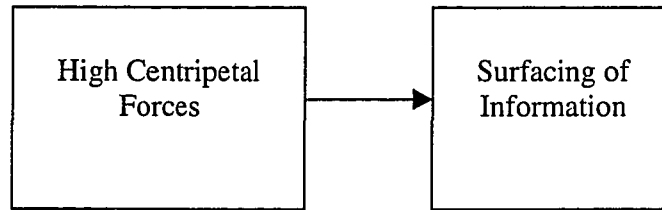


FIGURE 5.27

Early Goal Revelation leads to larger amounts of Goal Surfacing

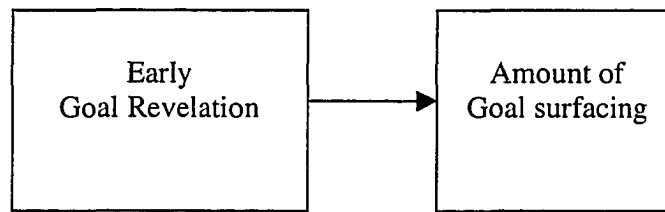


FIGURE 6.1

Mediator Model for Hypothesis 3a

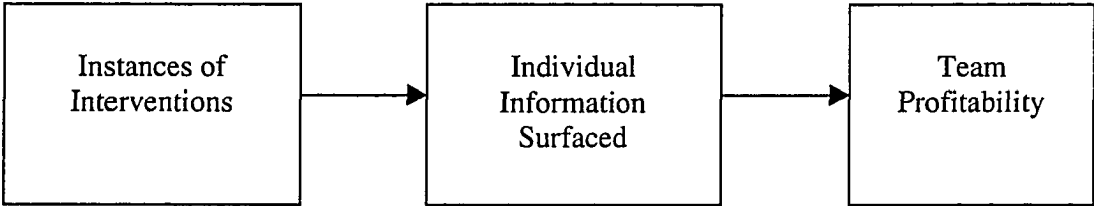


FIGURE 6.2

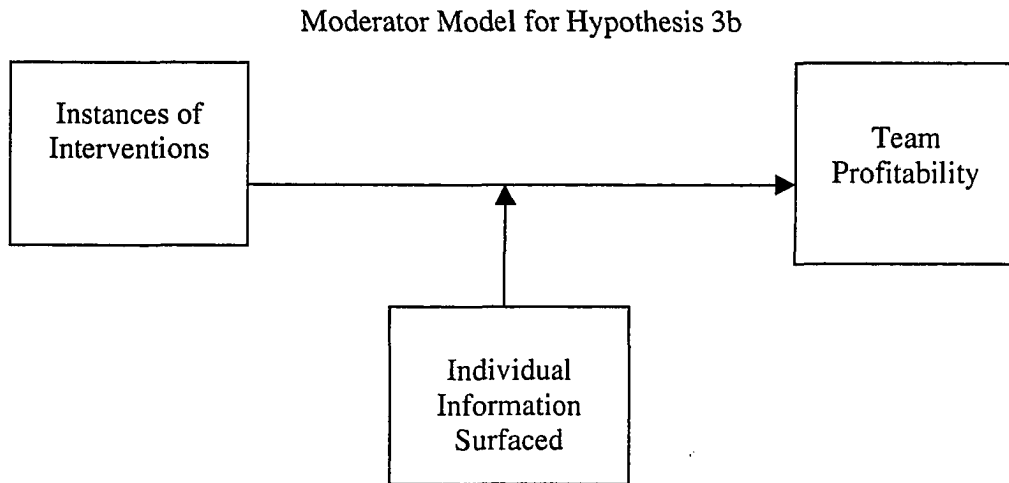


FIGURE 6.3

Model for Hypothesis 4

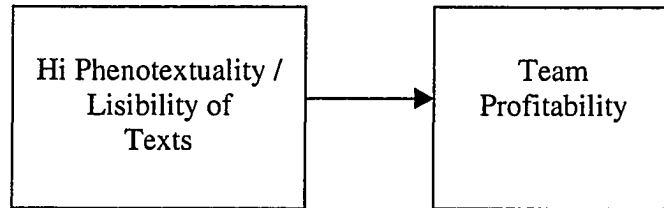


FIGURE 6.4

Model for Hypothesis 5

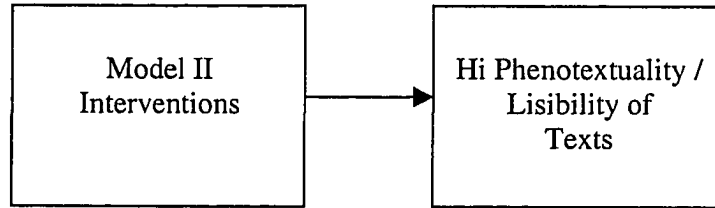




FIGURE 6.5

Model for Hypothesis 6

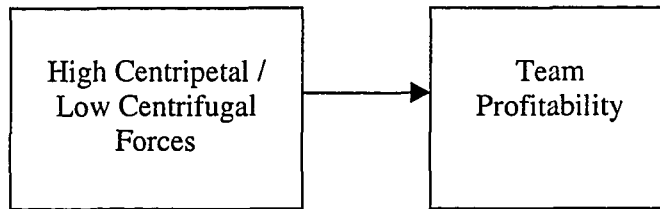


FIGURE 6.6

Model for Hypothesis 7

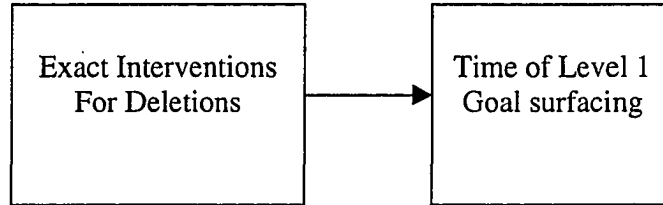
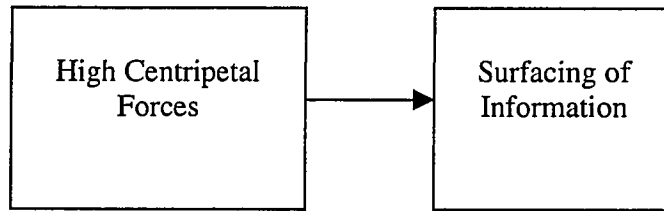


FIGURE 6.7

Model for Hypothesis 8



## TABLES

TABLE 2.1

Intervention Overview

Situation	Indicators	Questions
Deletion - Clearly and Obviously	-ly ending or "it was clear to me"	What leads you to see it that way? Can you give specific examples?
Deletion - Comparison	-er, -est, more/less, most/least, etc.	Better (faster, etc.) than what? How, specifically, do you see it this way?
Deletion - Can't, Impossible, and Unable	can't, impossible, unable, no one can	What prevents you from doing so? (Does anyone see things differently?)
Deletion - Advocacy without illustration	"should, must, expect, encourage"	What leads you to see it that way?
Distortion - Mind reading	"he thinks, she is angry"	How do you know, specifically, that X is true?
Distortion - Presuppositions	Assumptions embedded in argument	How do you know, specifically, that X? What has happened that leads you to believe Y?
Distortion - Forcing or Making	"I had to, you made me, you bore me"	What experience had you had that leads you to believe X? What was done that makes you Y?
Generalization - Unclear Nouns	Vague global nouns like "everyone" (try to imagine a person)	Can you give me an example? Who, specifically?
Generalization - Nonspecific verb	Vague verb like "discuss it" (specifics can't be visualized clearly)	What, specifically, are you suggesting? How, specifically, ought we to do that?

TABLE 3.1

Experimental Groups Used

Treatment	No Treatment
<p>Internal facilitator                      “Internally facilitated – treatment group”</p>	<p>Internal facilitator                      “Internally facilitated – no treatment group”</p>
<p>External facilitator                      “Externally facilitated – treatment group”</p>	<p>No facilitator                      “Control group”</p>

TABLE 3.2

Overview of Participants

University A			University B		
<u>Level</u>	<u># Teams</u>	<u># Participants</u>	<u>Level</u>	<u># Teams</u>	<u># Participants</u>
Junior/Seniors	11	50	MBA	3	13
			Freshmen	109	455

TABLE 3.3

## Overview of Freshmen Subjects

<b>Group</b>	<b>Teams</b>	<b>Participants</b>	<b># male</b>	<b># female</b>	<b>% Male</b>	<b># unknown gender</b>
<u>Disqualified</u>	23	62	35	27	56%	0
<u>No consent</u>	9	40	18	16	53%	6
<u>Internal-Treatment</u>	21	105	64	41	61%	0
<u>External-Treatment</u>	14	58	35	23	60%	0
<u>Internal-No Treatment</u>	16	82	50	32	61%	0
<u>Control</u>	26	108	61	47	56%	0
<b>Total</b>	<b>109</b>	<b>455</b>	<b>263</b>	<b>186</b>	<b>59%</b>	<b>6</b>



TABLE 3.4

## College Experience of Freshmen Subjects

Group	College experience - number of students enrolled for X semesters						
	X=1	X=2	X=3	X=4	X=5	X=6	X=unknown
<u>Disqualified</u>	50	5	3	2	0	1	1
<u>No consent</u>	31	3	0	0	0	0	6
<u>Internal-Treatment</u>	86	7	7	3	1	0	1
<u>External-Treatment</u>	39	7	10	2	0	0	0
<u>Internal-No Treatment</u>	76	5	1	0	0	0	0
<u>Control</u>	87	10	5	5	0	0	1
<b>Total</b>	<b>369</b>	<b>37</b>	<b>26</b>	<b>12</b>	<b>1</b>	<b>1</b>	<b>9</b>

TABLE 3.5

Experimental Group Assignments

Team Number	Experimental Group
1	Control
2	External Facilitator - Treatment
3	Internal Facilitator – No Treatment
4	Internal Facilitator – Treatment
5	Internal Facilitator – No Treatment
6	Internal Facilitator – Treatment
7	Control
8	External Facilitator – Treatment
9	Internal Facilitator – No Treatment
10	Internal Facilitator – Treatment
11	External Facilitator – Treatment
12	Control

TABLE 3.6

Typical Buddynames, Passwords, and Roles

Buddy Name	Password	Role	Team number
univbpers1	bable	Personnel director	1
univbfin1	bbaker	Finance Director	1
univbdev1	bcharlie	Development Director	1
univbur1	bdog	Union Representative	1
univbchair1	bubba	Chair of the Board	1

TABLE 3.7

Chalkboard Team Assignment

<b>Team Name</b>	<b># People on Team</b>
<b>“Rockets”</b>	<b>4</b>
<b>“Good Guys”</b>	<b>5</b>
<b>“Superlatives”</b>	<b>6</b>
<b>“Grunge”</b>	<b>5</b>

TABLE 3.8

## Data Collection Times and Team Group Assignment

Date	Time	Internal Fac. - Treated	External Fac. - Treated	Internal Fac. - Not Treated	Ctrl	No Consent	Dis- qualified
9/21	10:00 am	0	0	0	3	3	0
9/21	2:00 pm	2	1	0	0	2	0
9/21	4:30 pm	1	0	0	0	0	0
9/24	2:00 pm	1	0	0	1	0	2
9/24	4:30 pm	0	0	0	1	0	0
9/24	7:00 pm	0	1	1	1	0	0
9/27	12:30 pm	0	1	1	0	0	0
9/27	3:00 pm	0	0	0	1	0	0
9/28	2:00 pm	2	0	1	0	0	0
9/28	4:30 pm	0	1	1	1	1	0
10/1	2:00 pm	1	1	1	1	0	0
10/1	4:30 pm	2	1	0	1	0	0
10/1	7:00 pm	1	1	1	0	1	1
10/5	11:30 am	1	0	0	0	0	0
10/5	2:00 pm	0	0	0	1	0	0
10/5	4:30 pm	1	0	1	1	0	1
10/8	2:00 pm	0	0	0	0	0	1
10/8	4:30 pm	1	1	0	0	0	2
10/8	7:00 pm	2	1	1	0	0	1
10/11	12:30 pm	1	0	1	1	0	0
10/11	3:00 pm	1	1	0	2	0	1
10/12	11:30 am	0	0	0	0	0	1
10/12	2:00 pm	1	0	0	0	1	3
10/12	4:30 pm	0	1	1	2	0	1
10/19	12:30 pm	0	0	0	2	0	2
10/19	3:30 pm	2	1	2	0	0	1
10/20	11:00 am	0	0	1	1	0	2
10/20	2:00 pm	0	0	1	1	1	0
10/20	5:00 pm	1	1	0	2	0	1
10/29	11:00 am	0	0	2	1	0	3
10/29	5:00 pm	0	1	0	2	0	0

TABLE 3.9

Reliability of "Surfaced Level One Goals" variable

<b>Outside Rater Coding</b>	<b>Number of samples</b>
Surfaced Level One Goals	29
Surfaced Level Two Goals	2

TABLE 3.10

Reliability of "Surfaced Level Two Goals" variable

Outside Rater Coding	Number of samples
Exact interventions for cases of Deletions	24
Proxy interventions for cases of Generalizations	3
Exact interventions for cases of Deletions	2
Exact interventions for cases of Distortions	1
Unspecified intervention for cases of Deletions	1

TABLE 3.11

Reliability of "Proxy Interventions for cases of Deletions" variable

Outside Rater Coding	Number of samples
Proxy interventions for cases of Deletions	25
Exact interventions for cases of Deletions	4
Exact interventions for cases of Generalizations	1
Proxy interventions for cases of Generalizations	1



TABLE 3.12

Reliability of “Exact Interventions for cases of Generalization” variable

Outside Rater Coding	Number of samples
Exact interventions for cases of Generalizations	28
Exact interventions for cases of Distortions	2
Exact interventions for cases of Deletions	1

TABLE 3.13

Reliability of "Exact Interventions for cases of Generalization" variable

Outside Rater Coding	Number of samples
Exact interventions for cases of Generalizations	19
Proxy interventions for cases of Generalizations	9
Proxy interventions for cases of Distortions	1
Unspecified interventions for cases of Distortions	1
Proxy interventions for cases of Deletions	1

TABLE 4.1

## Potential Outlier Identification

<b>Group</b>	<b>Mean Profitability</b>	<b>Std. Dev</b>	<b>Z-score of outlier</b>	<b>Number cases in group</b>
External Facilitator – Treatment	\$16,800	\$60,855	1.84	14
External Facilitator – Treatment	\$16,800	\$60,855	1.95	14
Internal Facilitator – Treatment	\$2,914	\$47,112	-2.65	21

TABLE 4.2

Treatment vs. No Treatment Performance Comparison

Group	Mean Profitability	Standard Deviation	N
No Treatment	-9157.1429	46921.7560	42
Treatment	12305.8235	48189.0648	34

TABLE 4.3

Hypothesis 1 t-test, Treatment vs. No Treatment

<b>Variiances</b>	<b>t-value</b>	<b>DF</b>	<b>1-Tail Sig</b>
Equal	1.96	74	0.0269
Unequal	1.95	70	0.0274

TABLE 4.4

Experimental Group Performance Overview

<b>Group</b>	<b>Count</b>	<b>Mean</b>	<b>Standard Deviation</b>
Control	26	-\$9,164	\$46,771
Internal Facilitator – No Treatment	16	-\$9,145	\$48,702
External Facilitator – Treatment	14	\$16,800	\$60,855
Internal Facilitator - Treatment	20	\$9,159	\$38,393
Total	76	\$444	\$48,381

TABLE 4.5

Hypothesis 2a t-test Results

<b>Variiances</b>	<b>t-value</b>	<b>DF</b>	<b>1-Tail Sig</b>
Equal	1.69	32	0.328
Unequal	1.72	20	0.341

TABLE 4.6

Hypothesis 2b t-test Results

<b>Variiances</b>	<b>t-value</b>	<b>DF</b>	<b>1-Tail Sig</b>
Equal	1.30	28	0.103
Unequal	1.28	25	0.107



TABLE 4.7

Hypothesis 2c t-test Results

<b>Variiances</b>	<b>t-value</b>	<b>DF</b>	<b>1-Tail Sig</b>
Equal	1.51	38	0.0702
Unequal	1.39	21	0.0895

TABLE 4.8

Hypothesis 2d t-test Results

<b>Variances</b>	<b>t-value</b>	<b>DF</b>	<b>1-Tail Sig</b>
Equal	1.26	34	0.1077
Unequal	1.23	28	0.1147

TABLE 4.9

## Hypothesis 2e t-test Results

<b>Variances</b>	<b>t-value</b>	<b>DF</b>	<b>1-Tail Sig</b>
Equal	1.42	44	0.0812
Unequal	1.46	44	0.0790

TABLE 4.10

Effect of Surfaced Level One Goals on Profitability

Source	Degrees of Freedom	Sum of Squares	Mean Squares	F	Signif F
Regression	1	17.44234	17.44234	22.42505	0.0000
Residual	74	57.55766	0.77781		

Variable	B	SE of B	Beta	T	Sig T
Surfaced Level One Goals	0.482249	0.101837	0.482249	4.736	0.0000

TABLE 4.11

Effect of Treatment on Surfaced Level One Goals

Source	Degrees of Freedom	Sum of Squares	Mean Squares	F	Signif F
Regression	1	2.77259	2.77259	2.84064	0.0961
Residual	74	72.22741	0.97605		

Variable	B	SE of B	Beta	T	Sig T
Treatment Indicator	0.192270	0.114079	0.192270	1.685	0.0961

TABLE 4.12

Moderating Model Regression Results using Indicator Variable for Treatment

Source	Degrees of Freedom	Sum of Squares	Mean Squares	F	Signif F
Regression	3	18.80974	6.26991	8.03402	0.0001
Residual	72	56.19026	0.78042		

Variable	B	SE of B	Beta	T	Sig T
Surfaced Level One Goals	0.411219	0.188076	0.411219	2.186	0.0320
Treatment Indicator	0.238186	0.232427	0.119218	1.025	0.3089
Interaction of S1 and Trtmnt	0.058299	0.202115	0.058299	0.288	0.7738

TABLE 4.13

Effect of Proxy interventions to assist in cases of Deletions on Surfaced Level One Goals

Source	Degrees of Freedom	Sum of Squares	Mean Squares	F	Signif F
Regression	1	0.16084	0.16084	0.15906	0.6912
Residual	75	75.83916	1.01119		

Variable	B	SE of B	Beta	T	Sig T
Proxy Interventions for Deletions	-0.046004	0.115348	-0.46004	-0.399	0.6912

TABLE 4.14

Effect of Proxy interventions to assist in cases of Generalizations on Surfaced Level One  
Goals

Source	Degrees of Freedom	Sum of Squares	Mean Squares	F	Signif F
Regression	1	0.02158	0.02158	0.02130	0.8843
Residual	75	75.97842	1.01305		

Variable	B	SE of B	Beta	T	Sig T
Proxy Interventions for Generalizations	-0.016851	0.115454	-0.016851	-0.146	0.8843



TABLE 4.15

Effect of Exact interventions to assist in cases of Distortions on Surfaced Level One

Goals

Source	Degrees of Freedom	Sum of Squares	Mean Squares	F	Signif F
Regression	1	0.03440	0.03440	0.03396	0.8543
Residual	75	75.96560	1.01287		

Variable	B	SE of B	Beta	T	Sig T
Exact Interventions for Distortions	-0.021275	0.115444	-0.021275	-0.184	0.8543

TABLE 4.16

Effect of Exact interventions to assist in cases of Deletions on Surfaced Level One Goals

Source	Degrees of Freedom	Sum of Squares	Mean Squares	F	Signif F
Regression	1	0.16988	0.16988	0.16802	0.6830
Residual	75	75.83012	1.01107		

Variable	B	SE of B	Beta	T	Sig T
Exact Interventions for Deletions	0.047279	0.115341	0.047279	0.410	0.6830

TABLE 4.17

Effect of Exact interventions to assist in cases of Generalizations on Surfaced Level One

Goals

Source	Degrees of Freedom	Sum of Squares	Mean Squares	F	Signif F
Regression	1	0.00467	0.00467	0.00461	0.9460
Residual	75	75.99533	1.01327		

Variable	B	SE of B	Beta	T	Sig T
Exact Interventions for Generalizations	-0.007840	0.115467	-0.007840	-0.068	0.9460

TABLE 4.18

Effect of All Exact interventions on Surfaced Level One Goals

Source	Degrees of Freedom	Sum of Squares	Mean Squares	F	Signif F
Regression	1	0.06067	0.06067	0.05992	0.8073
Residual	75	75.93933	1.01252		

Variable	B	SE of B	Beta	T	Sig T
All Exact Interventions	0.028255	0.115424	0.028255	0.245	0.8073

TABLE 4.19

Effect of All Proxy interventions on Surfaced Level One Goals

Source	Degrees of Freedom	Sum of Squares	Mean Squares	F	Signif F
Regression	1	0.18698	0.18698	0.18498	0.6684
Residual	75	75.81302	1.01084		

Variable	B	SE of B	Beta	T	Sig T
All Proxy Interventions	-0.049601	0.115328	-0.049601	-0.430	0.6684

TABLE 4.20

Effect of All interventions to assist in cases of Generalizations on Surfaced Level One  
Goals

Source	Degrees of Freedom	Sum of Squares	Mean Squares	F	Signif F
Regression	1	0.01995	0.01995	0.01970	0.8888
Residual	75	75.98005	1.01307		

Variable	B	SE of B	Beta	T	Sig T
All Interventions for Generalizations	-0.016204	0.115455	-0.016204	-0.140	0.8888

TABLE 4.21

Effect on All interventions to assist in cases of Deletions on Surfaced Level One Goals

Source	Degrees of Freedom	Sum of Squares	Mean Squares	F	Signif F
Regression	1	0.00488	0.00488	0.00481	0.9449
Residual	75	75.81302	1.01084		

Variable	B	SE of B	Beta	T	Sig T
All Interventions for Deletions	-0.008011	0.115466	-0.008011	-0.069	0.9449

TABLE 4.22

Effect of Surfaced level 2 goals interacting with exact interventions for cases of  
Generalization on Team Profitability

Source	Degrees of Freedom	Sum of Squares	Mean Squares	F	Signif F
Regression	3	2.11070	0.70357	0.69510	0.5580
Residual	73	73.88930	1.001218		

Variable	B	SE of B	Beta	T	Sig T
Surfaced Level 2 X Exact Interventions for Generalizations	0.157550	0.134782	0.157550	1.169	0.2462
Surfaced Level 2 Goals	-0.174895	0.133936	-0.174895	-1.306	0.1957
Exact interventions for Generalizations	-0.011172	0.117658	-0.011172	-0.095	0.9246



TABLE 4.23

Effect of Surfaced level 2 goals interacting with exact interventions for cases of Deletions  
on Team Profitability

Source	Degrees of Freedom	Sum of Squares	Mean Squares	F	Signif F
Regression	3	2.33671	0.77890	0.77189	0.5134
Residual	73	73.66329	1.00909		

Variable	B	SE of B	Beta	T	Sig T
Surfaced Level 2 Goals	-0.184490	0.138060	-0.184490	-1.336	0.1856
Surfaced Level 2 X Exact Interventions for Deletions	0.159647	0.143428	0.159647	1.113	0.2693
Exact Interventions for Deletions	0.030271	0.120807	0.030271	0.251	0.8028

TABLE 4.24

Effect of Surfaced level 2 goals interacting with exact interventions for cases of  
Distortion on Team Profitability

Source	Degrees of Freedom	Sum of Squares	Mean Squares	F	Signif F
Regression	3	0.88846	0.29615	0.28783	0.8340
Residual	73	75.11154	1.02893		

Variable	B	SE of B	Beta	T	Sig T
Surfaced Level 2 Goals	-0.100971	0.117353	-0.100971	-0.860	0.3924
Surfaced Level 2 X Exact Interventions for Distortions	0.016598	0.164589	0.016598	0.101	0.9200
Exact Interventions for Distortions	0.035177	0.163605	0.035177	0.215	0.8304

TABLE 4.25

Effect of Surfaced level 2 goals interacting with proxy interventions for cases of  
Generalization on Team Profitability

Source	Degrees of Freedom	Sum of Squares	Mean Squares	F	Signif F
Regression	3	0.77492	0.25831	0.25067	0.8606
Residual	73	75.22508	1.03048		

Variable	B	SE of B	Beta	T	Sig T
Surfaced Level 2 Goals	-0.102253	0.122740	-0.102253	-0.833	0.4075
Surfaced Level 2 X Proxy Interventions for Generalizations	0.009828	0.129184	0.009828	0.076	0.9396
Proxy Interventions for Generalizations	-0.030853	0.125503	-0.030853	-0.246	0.8065

TABLE 4.26

Effect of Surfaced level 2 goals interacting with proxy interventions for cases of  
Deletions on Team Profitability

Source	Degrees of Freedom	Sum of Squares	Mean Squares	F	Signif F
Regression	3	3.67913	1.22638	1.23789	0.3022
Residual	73	72.32087	0.99070		

Variable	B	SE of B	Beta	T	Sig T
Surfaced Level 2 Goals	0.092667	0.196164	0.092667	0.472	0.6381
Surfaced Level 2 X Proxy Interventions for Deletions	-0.239012	0.199075	-0.239012	-1.201	0.2338
Proxy Interventions for Deletions	0.180449	0.118523	0.180449	1.522	0.1322

TABLE 4.27

Effect of Surfaced level 2 goals interacting with all proxy interventions on Team Profitability

Source	Degrees of Freedom	Sum of Squares	Mean Squares	F	Signif F
Regression	3	3.18292	1.06097	1.06364	0.3699
Residual	73	72.81708	0.99749		

Variable	B	SE of B	Beta	T	Sig T
Surfaced Level 2 Goals	0.089398	0.200576	0.089398	0.446	0.6571
Surfaced Level 2 X All Proxy Interventions	-0.227549	0.202680	-0.227549	-1.123	0.2652
All Proxy Interventions	0.161176	0.118696	0.161176	1.358	0.1787

TABLE 4.28

Effect of Surfaced level 2 goals interacting with all exact interventions on Team Profitability

Source	Degrees of Freedom	Sum of Squares	Mean Squares	F	Signif F
Regression	3	2.42473	0.80824	0.80192	0.4968
Residual	73	73.57527	1.00788		

Variable	B	SE of B	Beta	T	Sig T
Surfaced Level 2 Goals	-0.191864	0.139054	-0.191864	-1.380	0.1719
Surfaced Level 2 X All Exact Interventions	0.172482	0.142138	0.172482	1.213	0.2289
All Exact Interventions	0.019842	0.118710	0.019842	0.167	0.8677

TABLE 4.29

Effect of Surfaced level 2 goals interacting with all interventions for cases of Deletions  
on Team Profitability

Source	Degrees of Freedom	Sum of Squares	Mean Squares	F	Signif F
Regression	3	2.43662	0.81221	0.80599	0.4946
Residual	73	73.56338	1.00772		

Variable	B	SE of B	Beta	T	Sig T
Surfaced Level 2 Goals	-0.127654	0.234873	-0.127654	-0.544	0.5884
Surfaced Level 2 X All Interventions for Deletions	0.029253	0.237491	0.029253	0.123	0.9023
All Interventions for Deletions	0.146536	0.118722	0.146536	1.234	0.2211

TABLE 4.30

Effect of Surfaced level 2 goals interacting with all interventions for cases of  
Generalizations on Team Profitability

Source	Degrees of Freedom	Sum of Squares	Mean Squares	F	Signif F
Regression	3	1.34567	0.44865	0.43862	0.7260
Residual	73	74.65433	1.02266		

Variable	B	SE of B	Beta	T	Sig T
Surfaced Level 2 Goals	-0.150780	0.135062	-0.150780	-1.116	0.2679
Surfaced Level 2 X All Interventions for Generalizations	0.107116	0.136294	0.107116	0.786	0.4345
All Interventions for Generalizations	-0.028661	0.120635	-0.028661	-0.238	0.8129



TABLE 4.31

Effects of Surfaced level 1 goals interacting with exact interventions for cases of  
Generalization on Team Profitability

Source	Degrees of Freedom	Sum of Squares	Mean Squares	F	Signif F
Regression	3	19.22530	6.40843	8.23986	0.0001
Residual	73	56.77470	0.77774		

Variable	B	SE of B	Beta	T	Sig T
Surfaced Level One Goals	0.372728	0.123428	0.372728	3.020	0.0035
Surfaced Level 1 X Exact Interventions for Generalizations	0.191624	0.127498	0.191624	1.503	0.1372
Exact Interventions for Generalizations	-0.024799	0.106263	-0.024799	-0.233	0.8161

TABLE 4.32

Effect of Surfaced level 1 goals interacting with exact interventions for cases of Deletions  
on Team Profitability

Source	Degrees of Freedom	Sum of Squares	Mean Squares	F	Signif F
Regression	3	20.55472	6.85157	9.02087	0.0000
Residual	73	55.44528	0.75952		

Variable	B	SE of B	Beta	T	Sig T
Surfaced Level 1 Goals	0.351353	0.118377	0.351353	2.968	0.0041
Surfaced Level 1 X Exact Interventions for Deletions	0.266558	0.134357	0.266558	1.984	0.0510
Exact Interventions for Deletions	-0.077551	0.117105	-0.077551	-0.662	0.5099

TABLE 4.33

Effect of Surfaced level 1 goals interacting with exact interventions for cases of  
Distortions on Team Profitability

Source	Degrees of Freedom	Sum of Squares	Mean Squares	F	Signif F
Regression	3	17.69089	5.89696	7.38269	0.0002
Residual	73	58.30911	0.79875		

Variable	B	SE of B	Beta	T	Sig T
Surfaced Level One Goals	0.481778	0.102740	0.481778	4.689	0.0000
Surfaced Level 1 X Exact Interventions for Distortions	-0.042267	0.144317	-0.042267	-0.293	0.7704
Exact Interventions for Distortions	0.080778	0.144288	0.080778	0.560	0.5773

TABLE 4.34

Effects of Surfaced level 1 goals interacting with proxy interventions for cases of  
Generalization on Team Profitability

Source	Degrees of Freedom	Sum of Squares	Mean Squares	F	Signif F
Regression	3	17.93916	5.97972	7.51831	0.0002
Residual	73	58.06084	0.79535		

Variable	B	SE of B	Beta	T	Sig T
Surfaced Level One Goals	0.555265	0.140249	0.555265	3.959	0.0002
Surfaced Level 1 X Proxy Interventions for Generalizations	-0.117204	0.146750	-0.117204	-0.799	0.4271
Proxy Interventions for Generalizations	0.025963	0.111723	0.025963	0.232	0.8169

TABLE 4.35

Effects of Surfaced level 1 goals interacting with proxy interventions for cases of  
Deletions on Team Profitability

Source	Degrees of Freedom	Sum of Squares	Mean Squares	F	Signif F
Regression	3	19.88944	6.62981	8.62541	0.0001
Residual	73	56.11056	0.76864		

Variable	B	SE of B	Beta	T	Sig T
Surfaced Level One Goals	0.399327	0.152509	0.399327	2.618	0.0107
Surfaced Level 1 X Proxy Interventions for Deletions	0.118711	0.156308	0.118711	0.759	0.4500
Proxy Interventions for Deletions	0.132714	0.108416	0.132714	1.224	0.2248

TABLE 4.36

Effects of Surfaced level 1 goals interacting with all proxy interventions on Team Profitability

Source	Degrees of Freedom	Sum of Squares	Mean Squares	F	Signif F
Regression	3	19.51290	6.50430	8.40570	0.0001
Residual	73	56.48710	0.77380		

Variable	B	SE of B	Beta	T	Sig T
Surfaced Level 1 Goals	0.371755	0.198506	0.371755	1.873	0.0651
Surfaced Level 1 X All Proxy Interventions	0.134387	0.200411	0.134387	0.671	0.5046
All Proxy Interventions	0.126210	0.107849	0.126210	1.170	0.2457

TABLE 4.37

Effect of Surfaced level 1 goals interacting with all exact interventions on Team  
Performance

Source	Degrees of Freedom	Sum of Squares	Mean Squares	F	Signif F
Regression	3	20.32395	0.6.77465	8.88262	0.0000
Residual	73	55.67605	0.76269		

Variable	B	SE of B	Beta	T	Sig T
Surfaced Level 1 Goals	0.344741	0.122065	0.344741	2.824	0.0061
Surfaced Level 1 X All Exact Interventions	0.250955	0.131557	0.250955	1.908	0.0604
All Exact Interventions	-0.049619	0.110783	-0.049619	-0.448	0.6556

TABLE 4.38

Effect of Surfaced level 1 goals interacting with all interventions for cases of Deletions  
on Team Profitability

Source	Degrees of Freedom	Sum of Squares	Mean Squares	F	Signif F
Regression	3	21.29889	7.09963	9.47464	0.0000
Residual	73	54.70111	0.74933		

Variable	B	SE of B	Beta	T	Sig T
Surfaced Level 1 Goals	0.272897	0.157230	0.272897	1.736	0.0868
Surfaced Level 1 X All Interventions for Deletions	0.276346	0.162646	0.276346	1.699	0.0936
All Interventions for Deletions	0.077648	0.108059	0.077648	0.719	0.4747



TABLE 4.39

Effect of Surfaced level 1 goals interacting with all interventions for cases of  
Generalizations on Team Profitability

Source	Degrees of Freedom	Sum of Squares	Mean Squares	F	Signif F
Regression	3	17.79548	5.93183	7.43969	0.0002
Residual	73	58.20452	0.79732		

Variable	B	SE of B	Beta	T	Sig T
Surfaced Level 1 Goals	0.393806	0.163472	0.393806	2.409	0.0185
Surfaced Level 1 X All Interventions for Generalizations	0.111637	0.166856	0.111637	0.669	0.5056
All Interventions for Generalizations	-0.010172	0.108449	-0.010172	-0.094	0.9255

TABLE 5.1

Intertextual Analysis Dimensions and Questions

Global social contexts

<b>Precedent texts</b>	<ul style="list-style-type: none"> <li>• Whose social identities get constituted?</li> <li>• Who has access to being included in the text?</li> <li>• Who does the text quote?</li> <li>• Who speaks for whom?</li> <li>• What institutions commission the text?</li> </ul>	<ul style="list-style-type: none"> <li>• Whose conventions (genres, styles and types) does the text incorporate?</li> <li>• Who is the text distributed to for consumption?</li> <li>• Who are the audiences this text is designed to be interpreted and read by?</li> </ul>	<b>Anticipated texts</b>
	<ul style="list-style-type: none"> <li>• How are parts of other texts incorporated into the text (quoted or interpreted)?</li> <li>• How are various stories incorporated?</li> <li>• What is the time and place of each utterance?</li> <li>• Where are the footprints of the author?</li> </ul>	<ul style="list-style-type: none"> <li>• What is selected as newsworthy for target audiences?</li> <li>• What are the 'common sense' or 'insider' terms?</li> <li>• What are the parodies, ironies, and metaphorization?</li> <li>• What interpretative matrix does the author construct for readers to consume?</li> </ul>	

Local contexts

TABLE 5.2

Effect of Unique savings calculations – all teams on Team Profitability

Source	Degrees of Freedom	Sum of Squares	Mean Squares	F	Signif F
Regression	1	5.64471	5.64471	6.01736	0.0165
Residual	75	70.35529	0.93807		

Variable	B	SE of B	Beta	T	Sig T
Unique savings calculations – all teams	-0.272530	0.111099	-0.272530	-2.453	0.0165

TABLE 5.3

Effect of Model II treatment – all teams on Calculations of Savings

Source	Degrees of Freedom	Sum of Squares	Mean Squares	F	Signif F
Regression	1	1.18693	1.18693	1.18989	0.2788
Residual	75	74.81307	0.99751		

Variable	B	SE of B	Beta	T	Sig T
Unique savings calculations – all teams	0.124970	0.114565	0.124970	1.091	0.2788

TABLE 5.4

Effect of Proxy interventions to assist in cases of Deletions on Calculation of Savings

Source	Degrees of Freedom	Sum of Squares	Mean Squares	F	Signif F
Regression	1	0.03864	0.03864	0.03816	0.8457
Residual	75	75.96136	1.01282		

Variable	B	SE of B	Beta	T	Sig T
Proxy Interventions for Deletions	-0.022550	0.115441	-0.022550	-0.195	0.8457

TABLE 5.5

Effect of Proxy interventions to assist in cases of Generalizations on Calculation of Savings

Source	Degrees of Freedom	Sum of Squares	Mean Squares	F	Signif F
Regression	1	0.01762	0.01762	0.01739	0.8954
Residual	75	75.98238	1.01310		

Variable	B	SE of B	Beta	T	Sig T
Proxy Interventions for Generalizations	0.015226	0.115457	0.015226	0.132	0.8954

TABLE 5.6

Effect of Exact interventions to assist in cases of Distortions on Calculation of Savings

Source	Degrees of Freedom	Sum of Squares	Mean Squares	F	Signif F
Regression	1	0.08157	0.08157	0.08059	0.7773
Residual	75	75.91843	1.01225		

Variable	B	SE of B	Beta	T	Sig T
Exact Interventions for Distortions	-0.032762	0.115408	-0.032762	-0.284	0.7773

TABLE 5.7

Effect of Exact interventions to assist in cases of Deletions on Calculation of Savings

Source	Degrees of Freedom	Sum of Squares	Mean Squares	F	Signif F
Regression	1	0.19157	0.19157	0.18953	0.6646
Residual	75	75.80843	1.01078		

Variable	B	SE of B	Beta	T	Sig T
Exact Interventions for Deletions	0.050206	0.115324	0.050206	0.435	0.6646



TABLE 5.8

Effect of Exact interventions to assist in cases of Generalizations on Calculation of Savings

Source	Degrees of Freedom	Sum of Squares	Mean Squares	F	Signif F
Regression	1	1.12620	1.12620	1.12810	0.2916
Residual	75	74.87380	0.99832		

Variable	B	SE of B	Beta	T	Sig T
Exact Interventions for Generalizations	0.121731	0.114611	0.121731	1.062	0.2916

TABLE 5.9

Effect of All Exact interventions on Calculation of Savings

Source	Degrees of Freedom	Sum of Squares	Mean Squares	F	Signif F
Regression	1	0.48523	0.48523	0.48193	0.4897
Residual	75	75.51477	1.00686		

Variable	B	SE of B	Beta	T	Sig T
All Exact Interventions	0.079904	0.115101	0.079904	0.694	0.4897

TABLE 5.10

Effect of All Proxy interventions on Calculation of Savings

Source	Degrees of Freedom	Sum of Squares	Mean Squares	F	Signif F
Regression	1	0.01450	0.01450	0.01431	0.9051
Residual	75	75.98550	1.01314		

Variable	B	SE of B	Beta	T	Sig T
All Proxy Interventions	-0.013813	0.115459	-0.013813	-0.120	0.9051

TABLE 5.11

Effect of All interventions to assist in cases of Generalizations on Calculation of Savings

Source	Degrees of Freedom	Sum of Squares	Mean Squares	F	Signif F
Regression	1	0.87270	0.87270	0.87122	0.3536
Residual	75	75.12730	1.00170		

Variable	B	SE of B	Beta	T	Sig T
All Interventions for Generalizations	0.107158	0.114805	0.107158	0.933	0.3536

TABLE 5.12

Effect of All interventions to assist in cases of Deletions on Calculation of Savings

Source	Degrees of Freedom	Sum of Squares	Mean Squares	F	Signif F
Regression	1	0.01041	0.01041	0.01028	0.9195
Residual	75	75.98959	1.01319		

Variable	B	SE of B	Beta	T	Sig T
All Interventions for Deletions	0.011705	0.115462	0.011705	0.101	0.9195

TABLE 5.13

Dialogue Sources for the four Most Profitable and four Least Profitable Teams

Date	Time	Team ID	In Treated Group?	Source of Dialogue, # of Lines...				Profit / (Loss)
				From Level 1 Goals	From Level 2 Goals	From Level 3 Goals	From Profile / Opening Position	
10/01	7pm	#11	Yes	21	6	18	47	\$136.5K
10/20	5 pm	# 2	Yes	22	0	0	14	\$129K
10/01	2 pm	# 4	Yes	15	8	1	32	\$92.2K
10/19	3:30 pm	# 3	No	9	8	9	24	\$85.45K
10/20	11 am	# 3	No	0	13	8	14	(\$66.9K)
10/29	11 am	# 1	No	9	6	8	39	(\$82K)
10/12	4:30 pm	# 9	No	4	3	11	48	(\$94.78K)
10/01	2 pm	# 1	No	4	3	15	22	(\$107K)

TABLE 5.14

Effect of Time of first goal surfacing using Level 1 goals – all teams on Team Profitability

Source	Degrees of Freedom	Sum of Squares	Mean Squares	F	Signif F
Regression	1	8.66017	8.66017	9.64530	0.0027
Residual	75	67.33983	0.89786		

Variable	B	SE of B	Beta	T	Sig T
Time of first goal surfacing Level 1 goals – all teams	-0.337564	0.108692	-0.337564	-3.106	0.0027

TABLE 5.15

Effect of Time of average goal surfacing using Level 1 goals – all teams on Team  
Profitability

Source	Degrees of Freedom	Sum of Squares	Mean Squares	F	Signif F
Regression	1	7.65223	7.65223	8.39701	0.0049
Residual	75	68.34777	0.91130		

Variable	B	SE of B	Beta	T	Sig T
Time of avg. goal surfacing Level 1 goals – all teams	-0.317312	0.109503	-0.317312	-2.898	0.0049



TABLE 5.16

Effect of Time of first goal surfacing using Level 1 and Level 2 goals – all teams on  
Team Profitability

Source	Degrees of Freedom	Sum of Squares	Mean Squares	F	Signif F
Regression	1	7.55427	7.55427	8.27766	0.0052
Residual	75	68.44573	0.91261		

Variable	B	SE of B	Beta	T	Sig T
Time of first goal surfacing L1 & L2 goals – all teams	-0.315275	0.108867	-0.315275	-2.877	0.0052

TABLE 5.17

Effect of Time of average goal surfacing using Level 1 and Level 2 goals – all teams on  
 \*  
 Team Profitability

Source	Degrees of Freedom	Sum of Squares	Mean Squares	F	Signif F
Regression	1	6.94089	6.94089	7.53798	0.0076
Residual	75	69.05911	0.92079		

Variable	B	SE of B	Beta	T	Sig T
Time of avg. goal surfacing L1 & L2 goals – all teams	-0.302204	0.110071	-0.302204	-2.746	0.0076

TABLE 5.18

Effect of Time of first goal surfacing using Level 1 goals – teams surfacing Level 1 goals  
on Team Profitability

Source	Degrees of Freedom	Sum of Squares	Mean Squares	F	Signif F
Regression	1	2.40727	2.40727	2.53964	0.1227
Residual	27	25.59273	0.94788		

Variable	B	SE of B	Beta	T	Sig T
Time of first goal surfacing Level 1 goals – L1 teams	-0.293213	0.183991	-0.293213	-1.594	0.1227

TABLE 5.19

Effect of Time of average goal surfacing using Level 1 goals – teams surfacing Level 1 goals on Team Profitability

Source	Degrees of Freedom	Sum of Squares	Mean Squares	F	Signif F
Regression	1	1.52419	1.52419	1.55437	0.2232
Residual	27	26.47581	0.98059		

Variable	B	SE of B	Beta	T	Sig T
Time of avg. goal surfacing Level 1 goals – L1 teams	-0.233314	0.187139	-0.233314	-1.247	0.2232

TABLE 5.20

Effect of Time of first goal surfacing using Level 1 and Level 2 goals –teams surfacing  
L1 and L2 goals on Team Profitability

Source	Degrees of Freedom	Sum of Squares	Mean Squares	F	Signif F
Regression	1	4.05216	4.05216	4.46514	0.0422
Residual	33	29.94784	0.90751		

Variable	B	SE of B	Beta	T	Sig T
Time of first goal surfacing L1 & L2 – L1 & L2 teams	-0.345226	0.163375	-0.345226	-2.113	0.0422

TABLE 5.21

Effect of Time of average goal surfacing using Level 1 and Level 2 goals – teams surfacing Level 1 and Level 2 goals on Team Profitability

Source	Degrees of Freedom	Sum of Squares	Mean Squares	F	Signif F
Regression	1	3.23099	3.23099	3.46526	0.0716
Residual	33	30.76901	0.93239		

Variable	B	SE of B	Beta	T	Sig T
Time of avg. goal surfacing L1 & L2– L1, L2 teams	-0.308268	0.165600	-0.308268	-1.862	0.0716

TABLE 5.22

Effect of Exact Interventions for Deletions on Time of First surfacing of Level One Goals

Source	Degrees of Freedom	Sum of Squares	Mean Squares	F	Signif F
Regression	1	0.83189	0.83189	0.82674	0.3713
Residual	27	27.16811	1.00623		

Variable	B	SE of B	Beta	T	Sig T
Time of first Level One goal surfacing- L1 teams	0.172367	0.189570	0.172367	0.909	0.3713

TABLE 5.23

Effect of Exact Interventions for Deletions on Time of Average surfacing of Level One Goals

Source	Degrees of Freedom	Sum of Squares	Mean Squares	F	Signif F
Regression	1	0.46247	0.46247	0.45344	0.5064
Residual	27	27.53753	1.01991		

Variable	B	SE of B	Beta	T	Sig T
Time of avg. Level One goal surfacing – L1 teams	0.128518	0.190854	0.128518	0.673	0.5064



TABLE 5.24

Effect of Time of First surfacing of Level One Goals (for only teams surfacing Level One goals) on Level One Goal Surfacing

Source	Degrees of Freedom	Sum of Squares	Mean Squares	F	Signif F
Regression	1	10.79435	10.79435	16.93905	0.0003
Residual	27	17.20565	0.63725		

Variable	B	SE of B	Beta	T	Sig T
Time of first Level One goal surfacing- L1 teams	-0.620896	0.150860	-0.620896	-4.116	0.0003

TABLE 5.25

Effect Time of First surfacing of Level One and Two Goals (for only teams surfacing L1 and L2 goals) on Level One and Two goal Surfacing

Source	Degrees of Freedom	Sum of Squares	Mean Squares	F	Signif F
Regression	1	14.26284	14.26284	23.84704	0.0000
Residual	33	19.73716	0.59810		

Variable	B	SE of B	Beta	T	Sig T
Time of first L1 or L2 goal surfacing – L1 & L2 teams	-0.647685	0.132631	-0.647685	-4.883	0.0000

TABLE 5.26

Effect of Time of First surfacing of Level One Goals (for all teams) on Level One Goal  
Surfacing

Source	Degrees of Freedom	Sum of Squares	Mean Squares	F	Signif F
Regression	1	49.26266	49.26266	138.18497	0.0000
Residual	75	26.73734	0.35650		

Variable	B	SE of B	Beta	T	Sig T
Time of first Level One goal surfacing– all teams	-0.805104	0.068489	-0.805104	-11.755	0.0000

TABLE 5.27

Effect of Time of First surfacing of Level One and Two Goals (for all teams) on Level  
One and Two Goal Surfacing

Source	Degrees of Freedom	Sum of Squares	Mean Squares	F	Signif F
Regression	1	51.78637	51.78637	160.40458	0.0000
Residual	75	24.21363	0.32285		

Variable	B	SE of B	Beta	T	Sig T
Time of first L1 or L2 goal surfacing – L1 & L2 teams	-0.825469	0.065177	-0.825469	-12.665	0.0000

## **APPENDICES**

## APPENDIX A – RESEARCH MATERIALS

### Overview

This Appendix contains information that was distributed to the research subjects as part of their folder of information. Items include:

- 1) Informed consent form
- 2) Network Survey
- 3) Interpersonal Competencies Simulation Overview
- 4) Negotiation Round Instructions
- 5) Reflection Period Research Questions
- 6) Participant Briefing
- 7) Specific Role Instructions for
  - Finance Director
  - Personnel Director
  - Development Director
  - Union Representative
  - Chair of the Board
  - Internal Facilitator – No Treatment
  - Internal Facilitator - Treatment

Please note that the Participant Briefing and Role Instructions (with the exception of facilitator roles) are only slightly adapted from the “Acme Manufacturing” simulation, copyrighted by EduSim ([www.edusim.net](http://www.edusim.net)). EduSim has graciously granted permission to reprint their work in this dissertation.

### Informed Consent form



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THE WALLACE E. CARROLL  
SCHOOL OF MANAGEMENT

## **Informed Consent for Use of Data**

You are invited to participate in this research project on how to help teams work better. This project is a challenging exercise in team decision making and negotiation. This research is being conducted by Ray Luechtefeld, doctoral candidate in the Boston College Carroll Graduate School of Management. The exercise is required as part of a course you are taking at your school. As such, it is not optional, except by special permission from your professor. However, your consent is required to allow the researcher to use the results of the exercise. It is important that you are able to make a fully informed decision about whether or not to allow use of the results for research. The following are frequently asked questions about the research and how the results would be used. If you have any questions, be sure to ask.

### What is the purpose of the research?

The research tests theories about what makes a team more effective by looking at the dialogue in a team meeting. It looks at what is said and how it is said, and draws conclusions about more or less effective ways of interacting.

### How is the information gathered?

Teams will be working together in virtual space, i.e., a "chatroom", and sending typed messages across the Internet. At times the discussion will be paused to reflect and answer questions.

### How will the results of the research be used?

The research will be used for the researcher's dissertation and for potential publication in scholarly journals that consider issues of team dynamics and effectiveness. If you choose to participate, it is possible that some of the exact words you use during the exercise would be eventually published as part of the research process. However, your name, email, and identity will be kept secure by the researcher and will remain unknown to the general public. The researcher will provide a "throwaway" screen name for the exercise itself to further protect your identity.

### So what do you do, just have people chatting together?

Teams will be given a business problem to solve during the session. Different roles will be assigned for people to take on during the exercise, with different goals and pieces of information.

### How long will it take?

The exercise will take less than two hours altogether.

### How many people will be participating in the research?

Teams will have four to six members. There are expected to be more than 120 teams.

### What is the incentive for doing well?

The team that achieves the largest budget surplus among all teams participating in the exercise will receive a \$500 prize. That prize will be divided among individuals according to their individual goal attainment. For example, if you were on a four person team and you gained a level 3 individual goal while your other three team members each gained a level one goal, there would be six goal points in total allocated to your team. You would have gained half of them, and so would receive \$250 (half of the \$500) while each of your teammates would receive \$83.34 (one sixth of the \$500). (If there is a tie the prize will be evenly divided among the teams that did best.)

### Are there any risks involved in the exercise?

You can expect some degree of uncertainty, like dealing with any new situation. The business problem is set up like a role playing game, though, and has very little real risk. However, participation may entail a good deal of typing, so if you have carpal tunnel syndrome or other difficulties typing you might want to talk to your professor about it. There is also the risk that you may become fatigued. And, because you are competing and there is something at stake (\$500), there is the potential to become angry and frustrated.



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Remember, your consent to allow use of the data is voluntary. You can decide that you do not want to allow the data resulting from the exercise to be used for research at any point during or at the end of the exercise. There are no penalties for withdrawing your consent. Your professor will not be told whether or not you have given consent to use your data for research. You and your team will still be eligible for the prize even if you decide not to allow the data to be used for research.

If you agree to participate, please sign below verifying that you understand the risks and agree to participate. If you have any questions about the project, please contact Ray Luechtefeld by phone at 603-924-4114 or by email at ray@cognitra.com. If you have any questions regarding your rights as a participant in this research, you may contact Joanne Scibilia, Office of Research Administration at Boston College, by phone at (617) 552-3344.

Please **PRINT** the following information clearly so you may be contacted in the event you win the prize.

Your Name \_\_\_\_\_ Phone \_\_\_\_\_

email \_\_\_\_\_ buddyname \_\_\_\_\_

If you agree to allow your data to be used for research, please sign below.

I have read and understood the previous page and this page of the consent form. I agree to participate in the project by allowing the data resulting from this exercise to be used for research purposes.

**Participant:**

Signature \_\_\_\_\_ Date \_\_\_\_\_

**Researcher:**

Signature \_\_\_\_\_ Date \_\_\_\_\_



Network Survey

**Network Survey**

Please **print** the full names (first and last names) of your fellow students whom you would regard as a friend. This information will not be shared with any of your fellow students

_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____

## Interpersonal Competencies Simulation Overview

### Interpersonal Competencies Simulation

Your team will be using Instant Messenger (rather than verbal communication) to make decisions about how to reduce the budget for a fictitious company. When you arrive at the simulation, you will receive your role and a new screen name to use on Instant Messenger during the exercise. You will have ten minutes to study your role and ask questions.

**The Roles** of people on your team:

1. Development Director
2. Finance Director
3. Union Representative
4. Personnel Director
5. Optional: Meeting Facilitator or Chair of the Board

#### **Personal Goals and Team Goals**

Consistent with the realities of teams and organizations, each team member has a set of personal goals they would like to achieve for their own department. These are described to each person as Level 1, Level 2 and Level 3 goals. Overall, the team must reach a decision that reduces the budget by at least \$260,000, but any number of outcomes can result in various levels of success for individuals, and for the team as a whole.

**Note: Group decisions must be by consensus. Each person must achieve at least Level 1 goals.**

#### **The Timeline-- 90 minutes**

- One 10-minute question and answer period for set up time
- Four 10-minute Negotiation Rounds  
Your team works via Instant Messenger to decide how to balance the budget.
- Four 10-minute Reflection Rounds  
After each 10 minute negotiation round, each individual communicates privately with the Simulation Administrator to respond to three questions about the negotiation round that has just ended (see "Reflection Period Questions" handout).

#### **Your Team's Results and the Winner's Prize**

After the research is completed (more than 120 teams will participate), the team with the largest budget surplus will be awarded \$500. The prize will be distributed proportionately among team members based on their personal goal attainment. Therefore, it is not in your best interest to tell other teams about the game or help them in any way to achieve better results. Teams will get their actual calculated results from the facilitator after all teams have participated in the simulation.

## Negotiation Round Instructions

1. It is very helpful if your team members refer to one another by name or initial at the beginning of each line when directing comments to another member of your team. Your team will potentially include:

Development Director  
Finance Director  
Union Representative  
Personnel Director  
Meeting Facilitator  
Chair of the Board

Each member will have a descriptive buddy name, but to keep track of who you are talking to specifically, it helps to use an initial to refer to them rather than the full buddy name, and when speaking to everyone to say "All".

So, you might say to the Union Rep:  
"U, I agree (don't agree) with your position"

Or to nobody in particular::  
"All, I'm at a loss. Any suggestions?"

2. The prize will be given to the team that achieves the largest budget surplus and distributed to team members according to the attainment of personal goal levels. You must achieve at least Level 1 goals. You have an incentive as a team to do better than break even and, personally, to do better than your team members.

3. During the negotiation rounds you may, if you choose, open a window to speak to one of your team members privately. However, you must include the simulation administrator in your conversation. Failure to do so may result in your disqualification for the prize.

4. **A bell will mark the beginning and end of the negotiation rounds. You will be asked to raise your hand at the end of a negotiation round to ensure that everyone has stopped negotiating.** Negotiation during the reflection periods will result in your disqualification for the prize.

## Reflection Period Research Questions

Your responses to these questions are to be written in an Instant Message window to "simuladd", the Simulation Administrator. If you finish answering the questions before the ten minute reflection period ends, you can get up, leave the room, review your role, or whatever. Remember that the next negotiation round will begin immediately after the reflection period ends, so be ready to begin promptly as the next negotiation round starts.

**Note:** While you are answering these questions, please try to share what you were thinking and the meaning behind what happened during the negotiation round.

1. Review the conversation during the last ten minute negotiation round. If, during the dialogue, part of what you wrote was a response to someone else's actions, describe why you chose to respond in the way that you did.

For example, if someone wrote something that you responded to (so you felt he or she was the initiator and you were reacting to what was written), copy and paste what he or she said into the administrator's message window along with what you said in response. Why you chose to say what you did instead of something else?

2. If, during the dialogue, part of what you wrote was in anticipation of what you expected someone else's position to be, describe why you chose to write what you did.

For example, if you wrote something because you expected someone else to hold a certain position or to respond in a certain way (so you were acting as the initiator and you expected others to react to what you wrote), copy and paste what you said into the administrator's message window. Why did you choose to say what you did instead of something else? How was others' reaction what you expected or not what you expected?.

3. Describe and rate how you felt just before and after key incidents in the dialogue.

a. Glance through the conversation so far and note if there was a particular part of the conversation that you think was important. Copy and paste that part of the text into the administrator's instant message window.

b. Think of one or more words that describe your reaction to this key part of the text, and then think of a word describing the opposite reaction. For example, Very (descriptive word) and Not at all (descriptive word). Give a scale from 1 to ten and say how you felt before and after the portion of the text that created the reaction. So with a scale of 1 is Not at all (descriptive word), and 10 is very (descriptive word), you might be at a 3 before the conversation and at a 9 after.

So, for example, you would have something like this:

Person X said: XXXXXX

Person Y said: YYYYYY

"ZZ" describes my reaction, with a scale of 1 = not at all ZZ and 10 = very ZZ.

Before this excerpt I was at a ZZ level of 4, after the incident I was at a ZZ level of 9.

c. What is the meaning behind this incident and your reaction?

If several important incidents were in the last negotiation round, repeat 3a-3c as needed.

**At the end of the final (fourth) Reflection Period, briefly write in your Instant Message window the story of what happened during the negotiation period.**

## Participant Briefing

### Ipswich Integrated Manufacturing Technology (IIMTech) Participant Briefing Sheet

**Goal:** Participants are to use their communication and negotiation skills to balance the budget of IIMTech through a *consensus* decision.

You are all persons connected with Ipswich Integrated Manufacturing Technology. The company has fallen on hard economic times. IIMTech has posted six straight quarters of losses. The company is losing money because it spends more money on salaries and development than it takes in gross sales. The situation has now reached a critical breaking point. It is the task of your group to solve this problem by making sufficient cuts in the company's budget. Last year, the company's total expenditures was \$2,520,000 while revenue from sales and development was only \$2,260,000. IIMTech's sales representatives predict that the company will take in \$2,260,000 in the coming year. This means that \$260,000 (or more) must be cut from the company's budget in order to prevent its bankruptcy.

This task will not be easy. Each department in the company has their special interests that they will wish to preserve. A special meeting has been called. The heads of each department and a couple of other special representatives will be there. Together, this group must figure out a workable solution to the company's budget crisis or face financial collapse. **ABOVE ALL, THE GROUP MUST ATTAIN A CONSENSUS!** The reason for this is clear: if any representative cannot attain at least a minimum of their goals, they will use the power they hold to disrupt the company. Thus any "solution" which does not have the backing of **ALL** group members is ultimately a **FAILURE** and will probably lead to the company's demise. Each person in your group has their own separate sheet which lists their three levels of goals and some of the various strategies they might use to obtain them. While everyone in the simulation will attempt to achieve their highest level goals (Level 3), it is highly probable that some (possibly all) group members will not be able to attain the highest level.

Ipswich Integrated Manufacturing Technology has a complex power structure in which powers are distributed according to department and title. The Director of Development is the only person with the power to change the size of the "projects" (research and development) budget, and the only person with the power to merge departments. The Director of Finance is the only person who has the power to cut salaries or budgets in various departments. The Director of Personnel is the only person who has the power to hire or fire employees in any department. The Union Representative has no formal power within the company, but it is well known that the union can easily call a strike, which would cripple the company. The Chair of the Board usually has little formal power within the company as well, however, because of the crisis situation, the president of the company has given some emergency powers to the Chair of the Board. The company's budget follows.

## IIMTech Budget

### DEPARTMENT OF DEVELOPMENT:

Director of Development.....\$50,000  
3 Managers.....\$90,000 (3 @ \$30,000 each)  
Projects Budget (Research and Development).....\$100,000  
-Projects budget returned 20% + original investment at the end of the year (\$120,000) [Director contributed 5% to growth rate; +5% for each manager = total of 20%]  
TOTAL EXPENDITURES = \$240,000  
TOTAL REVENUE = \$120,000

### DEPARTMENT OF FINANCE:

Director of Finance.....\$50,000  
3 Managers.....\$90,000 (3 @ \$30,000 each)  
-the efficiency of the Finance Department saves the company \$80,000 a year; each member of the department saves \$20,000 apiece  
TOTAL EXPENDITURES = \$140,000  
TOTAL REVENUE = \$80,000

### DEPARTMENT OF PERSONNEL:

Director of Personnel.....\$50,000  
3 Managers.....\$90,000 (3 @ \$30,000 each)  
100 Regular Employees.....\$2,000,000 (100 @ \$20,000 each)  
-each manager saves the company \$15,000 each through increased productivity; the Regular Employees are represented by a union  
TOTAL EXPENDITURES = \$2,140,000  
TOTAL REVENUE (gross sales) = \$2,060,000 [includes \$45,000 saved by the managers of the department]

**Note:** The PROJECTS growth rate will continue to return 20% on investment as long as "X" amount of production (the work 100 employees can do in one year) continues, and the growth rate contributed by the Director of Development and the three managers in that department remain. The growth rate will fall 1% for every regular employee laid off.

In cutting IIMTech's budget there are many possibilities to consider. Your group can:

- cut programs
- lay off Regular Employees, Managers, or even Directors
- reduce Regular Employee salaries by 1-10%
- reduce Directors' salaries (down to a **minimum** of \$30,000)
- reduce Managers' salaries (down to a **minimum** of \$25,000)
- merge departments (thus laying off one director and several managers)
- create more revenue by investing **more** in the "Projects" budget
- cut expenditures by investing **less** in the "Projects" budget

## Finance Director Role Information

### **DIRECTOR OF FINANCE Profile Sheet**

As the Director of Finance, your chief concern is to cut costs wherever possible. You know that some tough decisions have to be made, but you feel that cutting salaries and manager positions are highly preferable to cutting departments and director positions. In the past, you have been frustrated by the lack of cooperation by the other directors and especially frustrated by the union position that wants to retain regular employee jobs and pay regardless of the cost to the company. You feel that the Chair of the Board may be a good ally in the fight to cut costs.

Naturally, you have some interests of your own. You want to retain your department's separate status. Also, you are impressed with the work of your management team and would like to keep at least two of your managers on board. Last, you want to put MORE money into the PROJECTS budget. For this reason, you want to create a *surplus*, which can then be added to the PROJECTS budget, which will give a greater return at the end of the year.

#### ***Your opening position/statement is:***

- An immediate 10% pay cut for regular employees (which would yield \$200,000)
  - An immediate pay cut for all managers from \$30,000 to \$25,000 (yielding \$45,000)
  - Cut two manager positions (yielding an additional \$50,000)
  - An immediate cut in pay for directors from \$50,000 to \$40,000 (yielding \$30,000)
- TOTAL COST SAVINGS = \$325,000; yielding a \$65,000 budget surplus

**GOALS:** You want to attain the highest goal level possible. If you cannot achieve at least *Level 1* goals, you will resort to the emergency action below.

**LEVEL 3 - ACHIEVE CONSENSUS**, retain your own position, retain three of your managers, retain your own department, and achieve a surplus which can be re-invested in the PROJECTS budget

**LEVEL 2 - ACHIEVE CONSENSUS**, retain your own position, retain two managers in your department, retain your department, achieve budget surplus

**LEVEL 1 - ACHIEVE CONSENSUS**, retain your own position and department, retain one of your managers, achieve a budget surplus

***IF LEVEL 1 GOALS CANNOT BE MET, YOU WILL CUT ALL REGULAR EMPLOYEE SALARIES 10%, MANAGEMENT SALARIES 16%, AND ALL DIRECTOR SALARIES 20%, THUS YIELDING +\$273,200!***

## Personnel Director Role Information

### **DIRECTOR OF PERSONNEL Profile Sheet**

As the Director of Personnel, you are the only person with the ability to hire and fire individuals. The one exception to this may be the secret powers that have been given to the Chair (rumor has it that if the company representatives fail to reach a consensus, the Chair has the power to fire ANYONE--including directors).

As the Director of Personnel, you are responsible for the job security of everyone at the company. This is not a responsibility you take lightly. Your highest priority is to cut costs without cutting jobs. You want to keep all three managers in your own department, but you are resigned to the fact that their salaries will have to be cut (as well as your own). You are willing to tolerate reasonable salary cuts in your department **as long as they are equal to the cuts in other departments' salaries**. You are also sympathetic to the union cause and would like to retain all 100 regular employee jobs, if possible. You do not want to cut any jobs--but if you are forced to--you will, starting at the top. It is your opinion that Finance and Development should be merged and the Director of Finance position should be eliminated.

#### ***Your opening position/statement is:***

-Merge Finance and Development, eliminating the Director of Finance position (yielding \$50,000)

-An immediate pay cut of 10% for ALL employees (2 directors = \$10,000, 9 managers = \$27,000, 100 regular employees = \$200,000, yielding a total of \$237,000)

**TOTAL COST SAVINGS = \$287,000**

**GOALS:** You want to attain the highest goal level possible. If you cannot achieve at least *Level 1* goals, you will resort to the emergency action below.

**LEVEL 3 - ACHIEVE CONSENSUS**, retain your own position, retain all 100 regular employees, retain at least 7 managers total, achieve budget surplus

**LEVEL 2 - ACHIEVE CONSENSUS**, retain your own position, retain at least 95 regular employee jobs, retain at least 5 managers total, balance the budget

**LEVEL 1 - ACHIEVE CONSENSUS**, retain your own position, retain at least 90 regular employee jobs, retain at least 3 managers total, balance the budget

***IF LEVEL 1 GOALS CANNOT BE MET, YOU WILL BALANCE THE BUDGET BY FIRING 10 REGULAR EMPLOYEES (YIELDING \$200,000) AND FIRING ONE MANAGER FROM EACH DEPARTMENT (YIELDING \$90,000).***

***TOTAL SAVED = \$290,000!***



## Development Director Role Information

### **DIRECTOR OF DEVELOPMENT Profile Sheet**

You and the managers in your department are the brains and talent of this company. Your department's research and development has actually returned 20% (in real costs) on every dollar invested in the PROJECTS budget. In order to keep this growth rate, you need to retain all three of your department's managers (the growth rate will fall 5% for each manager who is fired). You also want to see IIMTech's large manufacturing base maintained. In order for the growth rate to stay at 20%, all 100 regular employees need to stay on the work force, otherwise the return rate falls 1% for each employee laid off. You are certain that this 1% per employee CANNOT be made up through increased productivity by the remaining employees.

You feel that talent and proven performance should determine pay/job cuts. Your main targets in the budget cuts involve the management in both Personnel and Finance. You have the power to MERGE departments, but this would only mean that YOU would have to do extra work (since you have seniority, you would keep your job if your department was merged with another one). You also want to create a budget surplus which can then be re-invested into the PROJECTS budget, which will make the company more competitive (although this investment can only be increased by an additional \$20,000 this year).

#### **Your opening position/statement is:**

-Fire all 3 managers in Personnel (yielding \$90,000)

-Fire all 3 managers in Finance (yielding \$90,000)

-An immediate pay cut of 7% for ALL regular employees (yielding \$140,000)

TOTAL COST SAVINGS = \$320,000, of which \$20,000 can be put into PROJECTS, giving an increased return of \$4,000; TOTAL budget surplus would equal = \$324,000 at the end of the following year!

**GOALS:** You want to attain the highest goal level possible. If you cannot achieve at least *Level 1* goals, you will resort to the emergency action below.

**LEVEL 3 - ACHIEVE CONSENSUS**, retain 100 regular employees, retain all three managers in Development, retain your own position with **less than a 10% cut in pay** (\$5,000), achieve budget surplus and invest that surplus in PROJECTS

**LEVEL 2 - ACHIEVE CONSENSUS**, retain 100 regular employees, retain 2 managers in Development, retain own position with **less than a 20% cut in pay** (\$10,000), achieve budget surplus and invest that surplus in PROJECTS

**LEVEL 1 - ACHIEVE CONSENSUS**, retain 95 regular employees, retain one manager in Development, retain own position (**with a minimum salary of \$35,000**), achieve budget surplus and re-invest that surplus into PROJECTS

**IF LEVEL 1 GOALS CANNOT BE MET, YOU WILL IMMEDIATELY QUIT YOUR JOB AND ACCEPT A POSITION AT ANOTHER COMPANY!**

## Union Representative Role Information

### **REGULAR EMPLOYEE (UNION) REPRESENTATIVE Profile Sheet**

As the Regular Employee (Union) Representative, your chief concern is for the job security and wages of the regular employees at Ipswich Integrated Manufacturing Technology (IIMTech). In your opinion, IIMTech's losses have resulted from a structure that has paid a lot of salary money to managers and directors who have done little for the company except lose money. Your overall goal is to keep as many regular employee jobs as possible at the highest possible wages while trimming the budget. You also feel that a budget surplus should be re-invested into the PROJECTS budget to keep the company competitive. You *know* that the 20% growth rate in Projects can only continue with 100 regular employees, and that **"increased productivity" cannot make up for cuts in the work force.**

You strongly believe that all regular employees should keep their jobs, but you realize that the company is in financial trouble--and if it should go bankrupt--you will ALL lose your jobs. For this reason, you are willing to compromise. You are willing to accept SMALL cuts in pay or in the number of regular employee jobs as long as pay and position cuts are also performed at the managerial and director level. **You will absolutely refuse to accept a straight percentage decrease in wages across the board--the managers and directors must accept a greater percentage of pay cuts than the regular employees.**

#### ***Your opening position/statement is:***

- One manager from each department should be fired (saving \$90,000)
  - The salaries of the remaining 6 managers should be reduced from \$30,000 to \$25,000 each (saving another \$30,000)
  - The salaries of the three directors should be reduced to \$30,000 each (yielding \$60,000)
  - The salaries of regular employees will then be reduced by 4% (yielding \$80,000) and all 100 regular employee jobs would be kept
- TOTAL COST SAVINGS = \$260,000

**GOALS:** You want to attain the highest goal level possible. If you cannot achieve at least *Level 1* goals, you will resort to the emergency action below.

**LEVEL 3 - ACHIEVE CONSENSUS**, retain all 100 employee jobs with **less** than a 5% cut in wages (4.9% or less)

**LEVEL 2 - ACHIEVE CONSENSUS**, retain either all 100 regular employee jobs with **less** than a 7% cut in wages **OR** 95 jobs with **less** than a 5% cut in wages

**LEVEL 1 - ACHIEVE CONSENSUS**, retain either all 100 regular employee jobs with **less** than a 9% cut in wages **OR** 95 jobs with **less** than a 7% cut in wages **IF LEVEL 1 GOALS CANNOT BE MET, YOU WILL IMMEDIATELY CALL A STRIKE, WHICH MAY PUT THE COMPANY OUT OF BUSINESS!**

## Chair of the Board Role Information

### **CHAIR OF THE BOARD Profile Sheet**

As the non-salaried Chair of the Board of Ipswich Integrated Manufacturing Technology (IIMTech), you simply want to see the company stay alive and make profits. You are well aware that tensions are running high: morale is low, there is the talk of a strike by the union, and you've heard rumors that the Director of Development has been offered a position at another firm. You will be hearing a number of different proposals to "save" money, but upon closer analysis it is apparent that some of these proposals have not accounted for what will be lost because of decreased productivity.

As Chair, if the parties cannot reach a consensus, you have been given special authority to institute a drastic solution that no party will like. Personally, you believe that ten Regular Employees should be laid off and that the loss in productivity should be made up through increased employee effort. However, you realize that layoffs are unpopular, and you will not resort to this action unless absolutely necessary.

Your opening position/statement is:

- Every employee of the company (including management and directors) should immediately accept a wage cut of 10% across the board (saving \$242,000)
- \$35,000 will then be taken from the PROJECTS budget to balance the company's budget (saving \$35,000 gross, but only \$28,000 net because of a \$7,000 loss in return from investment in PROJECTS)
- All positions can then be kept

**TOTAL COST SAVINGS: \$270,000**

**GOALS:** You want to attain the highest goal level possible. If you cannot achieve at least Level 1 goals, you will resort to the emergency action below.

**LEVEL 3 - ACHIEVE CONSENSUS,** Balance the company's budget without calling on the president to mediate, and achieve a budget surplus of at least \$10,000.

**LEVEL 2 - ACHIEVE CONSENSUS,** Balance the company's budget with a budget surplus of at least \$5,000.

**LEVEL 1 - ACHIEVE CONSENSUS,** Balance the budget.

**IF LEVEL 1 GOALS CANNOT BE MET, YOU WILL IMMEDIATELY CUT 10 REGULAR EMPLOYEE JOBS (SAVING \$200,000) AND CUT THE WAGES OF EVERYONE ELSE BY 10% (SAVING \$222,000); TOTAL SAVED = \$422,000!**

## Internal Facilitator – No Treatment Role Information

### **GROUP FACILITATOR Profile Sheet**

You have been brought in as an outside facilitator to help Ipswich Integrated Manufacturing Technology (IIMTech) handle a critical budget meeting effectively. As the Facilitator for this group, you have been given a challenging and unique responsibility.

Your job is NOT to help the group make decisions by suggesting possible solutions or providing information that members may already have individually. **Therefore you need only skim the Participant briefing. But please read the following information carefully.**

Your job is to carefully observe the PROCESS of the group, and to intervene when necessary in order to help members come up with a workable decision. This will involve paying close attention to the group dynamics and interactions. You might, for example, intervene when you see the group encounter the following kinds of difficulties:

If differing perspectives are not being heard or explained clearly you might help them listen or express themselves better.

If the group seems unable to work its way out of a conflict, you might help them resolve it.

If the group does not seem to be working together effectively, you might help them analyze what is going wrong.

### **About individual goals**

Each of the other participants has a set of goals they are trying to achieve. To help you facilitate better, this information is provided below. **However, DO NOT make any individual's goals public to the rest of the group without the permission of that person.** Each person will be trying to achieve the highest goal possible, and revealing information about goals may damage their ability to negotiate effectively.

You will receive points for your contribution based on the average level of goals that each person in the group receives. You therefore have an incentive to see that each person in the group is able to attain the highest goal level possible while still balancing the budget.

----- Individual Goals follow -----

### **Development Director Goals**

**GOALS:** You want to attain the highest goal level possible. If you cannot achieve at least *Level 1* goals, you will resort to the emergency action below.

**LEVEL 3 - ACHIEVE CONSENSUS,** retain 100 regular employees, retain all three managers in Development, retain your own position with **less than a 10% cut in pay** (\$5,000), achieve budget surplus and invest that surplus in PROJECTS

**LEVEL 2 - ACHIEVE CONSENSUS,** retain 100 regular employees, retain 2 managers in Development, retain own position with **less than a 20% cut in pay** (\$10,000), achieve budget surplus and invest that surplus in PROJECTS

**LEVEL 1 - ACHIEVE CONSENSUS,** retain 95 regular employees, retain one manager in Development, retain own position (**with a minimum salary of \$35,000**), achieve budget surplus and re-invest that surplus into PROJECTS

*IF LEVEL 1 GOALS CANNOT BE MET, YOU WILL IMMEDIATELY QUIT YOUR JOB AND ACCEPT A POSITION AT ANOTHER COMPANY!*

### **Finance Director Goals**

**GOALS:** You want to attain the highest goal level possible. If you cannot achieve at least *Level 1* goals, you will resort to the emergency action below.

**LEVEL 3 - ACHIEVE CONSENSUS,** retain your own position, retain three of your managers, retain your own department, and achieve a surplus which can be re-invested in the PROJECTS budget

**LEVEL 2 - ACHIEVE CONSENSUS**, retain your own position, retain two managers in your department, retain your department, achieve budget surplus

**LEVEL 1 - ACHIEVE CONSENSUS**, retain your own position and department, retain one of your managers, achieve a budget surplus

*IF LEVEL 1 GOALS CANNOT BE MET, YOU WILL CUT ALL REGULAR EMPLOYEE SALARIES 10%, MANAGEMENT SALARIES 16%, AND ALL DIRECTOR SALARIES 20%, THUS YIELDING +\$273,200!*

### **Personnel Director Goals**

**GOALS:** You want to attain the highest goal level possible. If you cannot achieve at least *Level 1* goals, you will resort to the emergency action below.

**LEVEL 3 - ACHIEVE CONSENSUS**, retain your own position, retain all 100 regular employees, retain at least 7 managers total, achieve budget surplus

**LEVEL 2 - ACHIEVE CONSENSUS**, retain your own position, retain at least 95 regular employee jobs, retain at least 5 managers total, balance the budget

**LEVEL 1 - ACHIEVE CONSENSUS**, retain your own position, retain at least 90 regular employee jobs, retain at least 3 managers total, balance the budget

*IF LEVEL 1 GOALS CANNOT BE MET, YOU WILL BALANCE THE BUDGET BY FIRING 10 REGULAR EMPLOYEES (YIELDING \$200,000) AND FIRING ONE MANAGER FROM EACH DEPARTMENT (YIELDING \$90,000).  
TOTAL SAVED = \$290,000!*

### **Union Representative Goals**

**GOALS:** You want to attain the highest goal level possible. If you cannot achieve at least *Level 1* goals, you will resort to the emergency action below.

**LEVEL 3 - ACHIEVE CONSENSUS**, retain all 100 employee jobs with **less** than a 5% cut in wages (4.9% or less)

**LEVEL 2 - ACHIEVE CONSENSUS**, retain either all 100 regular employee jobs with **less** than a 7% cut in wages **OR** 95 jobs with **less** than a 5% cut in wages

**LEVEL 1 - ACHIEVE CONSENSUS**, retain either all 100 regular employee jobs with **less** than a 9% cut in wages **OR** 95 jobs with **less** than a 7% cut in wages

*IF LEVEL 1 GOALS CANNOT BE MET, YOU WILL IMMEDIATELY CALL A STRIKE, WHICH MAY PUT THE COMPANY OUT OF BUSINESS!*

## Internal Facilitator – Treatment Role Information

### **GROUP FACILITATOR Profile Sheet**

You have been brought in as an outside facilitator to help Ipswich Integrated Manufacturing Technology (IIMTech) handle a critical budget meeting effectively. As the Facilitator for this group, you have been given a challenging and unique responsibility.

Your job is NOT to help the group make decisions by suggesting possible solutions or providing information that members may already have individually. **Therefore you need only skim the Participant briefing. But please read the following information carefully.**

Your job is to carefully observe what is said in the group, and to intervene when necessary in order to help members state the reasoning behind their actions.

Recently a research company has given you a guidebook on how to help people do this by looking carefully at what they say, especially places where people withhold (**delete**) their reasoning, use reasoning that is **distorted** in some way, and make **generalizations** while reasoning about other people and events. The guidebook has given you very specific instructions about what to look for and say in particular situations. The instructions are designed to help the team work together more effectively and make better team decisions. You are interested in putting into practice some of what the guidebook has to say.

Read the following descriptions of ways that people are unable to state their full reasoning. During the exercise, try to ask the suggested kinds of questions. **A handout summarizing the interventions is on the last page of this section.**

#### **Deletion**

Deletions occur when some important aspect of a person's understanding or perspective has not been stated. Four kinds of deletions can occur, which are named "Clearly and Obviously", "Comparisons", "Can't, Impossible, and Unable", and "Advocacy without illustration".

##### 1. Clearly and Obviously

This class of deletion is indicated by an adverb ending in -ly, and usually involve statements regarding something that is taken for granted. For example, "He was clearly up to something." They may also remove the -ly by using a verb form, "It was clear to me that he was up to something." The deletion occurs because the supporting data (i.e., how did the person know that he was up to something) has not been stated.

Interventions to deal with these cases can include questions like:  
What leads you to see it that way?  
Can you give specific examples?

## 2. Comparisons

This kind of deletion is indicated by endings such as -er or -est or more/less, most/least, and involves some kind of comparison. For example, "Its better if we don't lay off people". The deletion occurs because the object it is being compared to has not been stated, i.e., better than what?

Interventions to deal with this form of deletion involve two steps, probing for the missing comparison and requesting specific supporting data.

Better (faster, etc.) than what?

How, specifically, do you see it this way?

## 3. Can't, Impossible, and Unable

This kind of deletion involves statements about the limits of possibility and are indicated by words or phrases like "can't, impossible, unable, no one can". For example, "I can't fire two managers". The deletion occurs because there is not a statement of what is blocking or preventing such action.

Interventions to deal with this form of deletion involve asking questions like:

What prevents you from doing so?

In addition, depending on circumstance, it might be helpful to poll other team members by saying something like "Does anyone see things differently?".

## 4. Advocacy without illustration

This kind of deletion involves statements advocating or encouraging a certain action, viewpoint, or perspective and is indicated by words or phrases like "should, must, expect, encourage". For example, "You have to get rid of two managers". The deletion occurs because there is not a statement of the reasoning that leads to the advocacy, that is, it is not illustrated by reasoning or specific examples.

Interventions to deal with this form of deletion involve asking questions like:

What leads you to see it that way?

## **Distortion**

Distortions occur when an aspect of a person's understanding or perspective has been twisted or stated in a way that suggests questionable veracity. Three kind of distortions can occur, which are named "Mind Reading", "Presuppositions", and "Forcing or Making".

### 1. Mind reading

This kind of distortion occurs when someone makes statements that infer another's mental or emotional state and is indicated by words or phrases like, "he



thinks, she is angry". For example, "She was upset at the meeting". The distortion occurs because it is not truly possible to see into the mind of others.

Interventions to deal with this form of distortion involve asking for the specific data that led to the conclusion by asking questions like:  
How do you know, specifically, that X is true?

## 2. Presuppositions

This kind of distortion occurs when someone makes statements that must be true for the rest of their sentence or statements to make sense. For example, "I hope you're not going to go back on your word like John did". The distortion occurs because the lack of John's veracity is taken for granted and not open to test.

Interventions to deal with this form of distortion involve asking for the specific data that led to the conclusion by asking questions like:  
How do you know, specifically, that X?  
What has happened that leads you to believe Y?

## 3. Forcing or Making

This kind of distortion occurs when someone indicates that they only have one course of action or choice in a given situation and is indicated by phrases like "I had to, you made me, you bore me". For example, "I had to get rid of ten percent of my employees". The distortion occurs because, in reality, there are almost always choices made and by claiming that force was involved one pushes the responsibility for one's actions onto others.

Interventions to deal with this kind of distortion involve asking for the specific data that led to the conclusion by asking questions like:  
What experience had you had that leads you to believe X?  
What was done that makes you Y?

## **Generalization**

Generalizations occur when specific activities or individuals are replaced by global descriptions. Two classes of generalizations can occur, which are named "Unclear Nouns" and "Unclear Verbs".

### 1. Unclear Nouns

This kind of generalization occurs when a specific individual or party is replaced by a global group and is indicated by the use of words like "everyone, people, men" For example, "Everyone wants me to X".

Interventions to deal with this form of generalization involve asking for the specific person or example that led to the conclusion by asking questions like:  
Can you give me an example?  
Who, specifically?

### 2. Nonspecific verbs.

This kind of generalization occurs when a specific action is replaced by a global verb that is hard to visualize. For example, "Let's just discuss it".

Interventions to deal with this form of generalization involve asking for the specific action that is being suggested by asking questions like:

What, specifically, are you suggesting?

How, specifically, ought we to do that?

### **About individual goals**

Each of the other participants has a set of goals they are trying to achieve. To help you facilitate better, this information is provided below. However, **DO NOT make any individual's goals public to the rest of the group without the permission of that person.** Each person will be trying to achieve the highest goal possible, and revealing information about goals may damage their ability to negotiate effectively.

You will receive points for your contribution based on the average level of goals that each person in the group receives. You therefore have an incentive to see that each person in the group is able to attain the highest goal level possible while still balancing the budget.

----- Individual Goals follow -----

### **Development Director Goals**

**GOALS:** You want to attain the highest goal level possible. If you cannot achieve at least *Level 1* goals, you will resort to the emergency action below.

**LEVEL 3 - ACHIEVE CONSENSUS**, retain 100 regular employees, retain all three managers in Development, retain your own position with **less than a 10% cut in pay** (\$5,000), achieve budget surplus and invest that surplus in PROJECTS

**LEVEL 2 - ACHIEVE CONSENSUS**, retain 100 regular employees, retain 2 managers in Development, retain own position with **less than a 20% cut in pay** (\$10,000), achieve budget surplus and invest that surplus in PROJECTS

**LEVEL 1 - ACHIEVE CONSENSUS**, retain 95 regular employees, retain one manager in Development, retain own position (**with a minimum salary of \$35,000**), achieve budget surplus and re-invest that surplus into PROJECTS

*IF LEVEL 1 GOALS CANNOT BE MET, YOU WILL IMMEDIATELY QUIT YOUR JOB AND ACCEPT A POSITION AT ANOTHER COMPANY!*

### **Finance Director Goals**

**GOALS:** You want to attain the highest goal level possible. If you cannot achieve at least *Level 1* goals, you will resort to the emergency action below.

**LEVEL 3 - ACHIEVE CONSENSUS**, retain your own position, retain three of your managers, retain your own department, and achieve a surplus which can be re-invested in the PROJECTS budget

**LEVEL 2 - ACHIEVE CONSENSUS**, retain your own position, retain two managers in your department, retain your department, achieve budget surplus

**LEVEL 1 - ACHIEVE CONSENSUS**, retain your own position and department, retain one of your managers, achieve a budget surplus

*IF LEVEL 1 GOALS CANNOT BE MET, YOU WILL CUT ALL REGULAR EMPLOYEE SALARIES 10%, MANAGEMENT SALARIES 16%, AND ALL DIRECTOR SALARIES 20%, THUS YIELDING +\$273,200!*

### **Personnel Director Goals**

**GOALS:** You want to attain the highest goal level possible. If you cannot achieve at least *Level 1* goals, you will resort to the emergency action below.

**LEVEL 3 - ACHIEVE CONSENSUS**, retain your own position, retain all 100 regular employees, retain at least 7 managers total, achieve budget surplus

**LEVEL 2 - ACHIEVE CONSENSUS**, retain your own position, retain at least 95 regular employee jobs, retain at least 5 managers total, balance the budget

**LEVEL 1 - ACHIEVE CONSENSUS**, retain your own position, retain at least 90 regular employee jobs, retain at least 3 managers total, balance the budget

*IF LEVEL 1 GOALS CANNOT BE MET, YOU WILL BALANCE THE BUDGET BY FIRING 10 REGULAR EMPLOYEES (YIELDING \$200,000) AND FIRING ONE MANAGER FROM EACH DEPARTMENT (YIELDING \$90,000).  
TOTAL SAVED = \$290,000!*

### **Union Representative Goals**

**GOALS:** You want to attain the highest goal level possible. If you cannot achieve at least *Level 1* goals, you will resort to the emergency action below.

**LEVEL 3 - ACHIEVE CONSENSUS**, retain all 100 employee jobs with **less** than a 5% cut in wages (4.9% or less)

**LEVEL 2 - ACHIEVE CONSENSUS**, retain either all 100 regular employee jobs with **less** than a 7% cut in wages **OR** 95 jobs with **less** than a 5% cut in wages

**LEVEL 1 - ACHIEVE CONSENSUS**, retain either all 100 regular employee jobs with **less** than a 9% cut in wages **OR** 95 jobs with **less** than a 7% cut in wages

*IF LEVEL 1 GOALS CANNOT BE MET, YOU WILL IMMEDIATELY CALL A STRIKE, WHICH MAY PUT THE COMPANY OUT OF BUSINESS!*

### Helpful tips and reminders for intervening

Situation	Indicators	Questions
Deletion - Clearly and Obviously	-ly ending or "it was clear to me"	What leads you to see it that way? Can you give specific examples?
Deletion - Comparisons	-er, -est, more/less, most/least, etc.	Better (faster, etc.) than what? How, specifically, do you see it this way?
Deletion - Can't, Impossible, and Unable	can't, impossible, unable, no one can	What prevents you from doing so? (Does anyone see things differently?)
Deletion - Advocacy without illustration	"should, must, expect, encourage"	What leads you to see it that way?
Distortion - Mind reading	"he thinks, she is angry"	How do you know, specifically, that X is true?
Distortion - Presuppositions	Assumptions embedded in argument	How do you know, specifically, that X? What has happened that leads you to believe Y?
Distortion - Forcing or Making	"I had to, you made me, you bore me"	What experience had you had that leads you to believe X? What was done that makes you Y?
Generalization - Unclear Nouns	Vague global nouns like "everyone" (try to imagine a person)	Can you give me an example? Who, specifically?
Generalization - Nonspecific verb	Vague verb like "discuss it" (specifics can't be visualized clearly)	What, specifically, are you suggesting? How, specifically, ought we to do that?

## Final Team Decision document

### Final Team Decision

Team Number (Please circle) 1 2 3 4 5 6 7 8 9 10 11 12

BuddyName \_\_\_\_\_ Date \_\_\_\_\_

<i>Department</i>	<i>Titles</i>	<i>Previous Number Employed</i>	<i>New Number Employed</i>
Development	Director	1	=>
Development	Managers	3	=>
Finance	Director	1	=>
Finance	Managers	3	=>
Personnel	Director	1	=>
Personnel	Managers	3	=>
Regular	Employees	100	=>

<i>Area</i>	<i>Item</i>	<i>Previous Budget</i>	<i>New Budget</i>
Development	Project Budget	\$100,000	=>

<i>Paid Employees</i>	<i>Previous Salary</i>	<i>New Salary</i>	<i>OR</i>	<i>% Salary Cut</i>
Dev. Director	\$50,000	=>		=>
Dev. Mgrs.	\$30,000	=>		=>
Fin. Director	\$50,000	=>		=>
Fin. Mgrs.	\$30,000	=>		=>
Pers. Director	\$50,000	=>		=>
Pers. Mgrs.	\$30,000	=>		=>
Regular Emps.	\$20,000	=>		=>

#### Team Signatures

I agree that this decision reflects the consensus of our team.

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

APPENDIX B – SELECTED CONVERSATIONS

Conversation I (From October 1, 2pm Team 4 - High profit)

Line #	Buddyname	Time	Dialogue	Summary	Comments
1	UnivBdev4	2:22:01 PM	hey	Social	The team members greet each other as they enter this new social setting, even though they had just walked into the computer room together. They identify themselves by name.
2	UnivBUR4	2:22:07 PM	hey	Social	
3	UnivBdev4	2:22:17 PM	ok this is dan	Social	
4	UnivBUR4	2:22:32 PM	this is mark	Social	
5	UnivBpers4	2:22:35 PM	this is tom	Social	
6	UnivBfin4	2:22:43 PM	i'm linda, finance	Social	
7	UnivBUR4	2:22:47 PM	we have to work as a team to win	Unity	The Union Representative makes a call for teamwork to win the \$500 prize. University B emphasizes teamwork in its curriculum.
8	UnivBfac24	2:22:48 PM	this is kathy	Social	
9	UnivBdev4	2:22:59 PM	yeah exactly	Unity	The Development Director agrees with the call for teamwork.

10	UnivBpers4	2:23:03 PM	i'm director of personnell	Statepr of	
11	UnivBdev4	2:23:11 PM	the middle ground will,proolly be the most effective	Strat	The Development Director cites a belief (source unknown) about a strategy to win.
12	UnivBdev4	2:23:17 PM	i hate thois keyboard	Enviro n	Comments are made about the equipment in the room.
13	UnivBfac24	2:23:23 PM	i know	Enviro n	
14	UnivBdev4	2:23:24 PM	i cant type on it	Enviro n	
15	UnivBfac24	2:23:26 PM	i do to	Enviro n	
16	UnivBUR4	2:23:29 PM	we have too many managers	Statepr of	The UR's role description says his goal is "to keep as many regular employee jobs as possible at the highest possible wages while trimming the budget". He begins by directing attention away from the employees. (A move toward "winning" over his team mates just after calling for teamwork).
17	UnivBdev4	2:23:44 PM	how about we cut one in each dep	Propos level2	The Development Director's level 2 goals include: ", retain 100 regular employees, retain 2 managers in Development". This would meet



					this goal.
18	UnivBUR4	2:23:48 PM	1 in each depart should be fired save 90000	Propos prof	The UR's opening position is "One manager from each department should be fired saving \$90,000"
19	UnivBdev4	2:23:48 PM	see where that gets us	Directing	The Development Director (DD) gives directions.
20	UnivBfin4	2:23:57 PM	okay	Comply	The Finance Director responds to the DD's instruction.
21	UnivBdev4	2:24:03 PM	lets see how much prodcutivity that loses	Directing	The DD again gives directions.
22	UnivBpers4	2:24:06 PM	ok	Comply	This time the Personnel Director responds.
23	UnivBdev4	2:24:07 PM	finance	Directing	The DD tells the Finance Director to look into it.
24	UnivBdev4	2:24:11 PM	look inot that	Directing	
25	UnivBUR4	2:25:07 PM	im ssupposed to say cut the workers only 4% but i can get away with 4.9%	Statelevel3	The UR says he's "supposed to say" his opening position, but can "get away" with his Level 3 goal. This gives the impression of a sacrifice, when, if it were accepted, it would be the best option for him.
26	UnivBpers4	2:25:37 PM	all - i am supposed to keep all three manangers in my department, but i can cut our salaries	Statepr of	The Personnel Director's PD's) profile sheet says, "You want to keep all three managers in your own

					department, but you are resigned to the fact that their salaries will have to be cut." This is not a giveaway at all, but couched in terms of being one, as are the previous statements by DD and UR.
2 7	UnivBfin4	2:25:38 PM	what about a 10% pay cut for all employees	Propos prof	The Finance Director's (DF's) opening position includes "an immediate 10% pay cut for regular employees". In the Reflection Period, DF commented on this question by saying, " i wanted to start working with cutting pay. i should have started higher, and worked down"
2 8	UnivBdev4	2:25:48 PM	sounds good	Agree	DD agrees, since he prefers pay cuts to layoffs i.e. his profile says, "In order for the growth rate to stay at 20%, all 100 regular employees need to stay on the work force,"
2 9	UnivBUR4	2:25:49 PM	am i the only person timpossible	Disagr ee	The UR's Level 1 goal says, "retain either all 100 regular employee jobs with less than a 9% cut in wages

					OR 95 jobs with less than a 7% cut in wages.”
30	UnivBdev4	2:25:54 PM	what does that bring us to	Directing	The DD again gives directions.
31	UnivBUR4	2:25:58 PM	i cant do that	Disagree	The UR says that 10% is not possible.
32	UnivBpers4	2:26:05 PM	why not	Inqreason	The PD inquires as to why not.
33	UnivBUR4	2:26:22 PM	everyone must have level1 to compete	Rules	The UR implies that this won't allow him to meet Level 1, but does not state his level 1 goals, which gives him more room for negotiation. This is a call for relief based on the authority of the goals while preserving the freedom of action by withholding their content.
34	UnivBdev4	2:26:32 PM	so you cant cut anyone	Inqability	DD seeks to clarify UR's statement.
35	UnivBfac24	2:26:38 PM	what else can you do instead?	Inqability	The facilitator (FAC) has copies of everyone's goal levels and may be attempting to prompt UR for his goals.
36	UnivBfin4	2:26:41 PM	a 10% paycut yields \$200,000	Calc	FD responds to DD's earlier request for the results of a 10% cut.
37	UnivBdev4	2:26:53 PM	whats yuour level1	Inqlevel	DD asks for UR's level 1 goals.
38	UnivBpers4	2:26:54 PM	ok	Agree	PD says OK, perhaps to the FD.

39	UnivBdev4	2:26:55 PM	ur	Directing	DD indicates he is speaking to the UR
40	UnivBpers4	2:27:07 PM	that may be a little too much then		PD considers that 10% is not a viable option.
41	UnivBdev4	2:27:18 PM	a 10% all around	Proposing	DD raises the issue of ten percent salary cuts for everyone.
42	UnivBdev4	2:27:19 PM	?		
43	UnivBUR4	2:27:19 PM	now to win should we have every body meet level 1 only	Strat	UR does not respond with his level 1 goals. Instead he asks if everyone should be at a level 1 goal. Stating his goal would provide a loss of bargaining power. Shifting the question to whether everyone should be at level 1 would open a way for everyone to state their goals, equalizing power. It also provides an important reframing question for the group...
44	UnivBpers4	2:27:25 PM	but 10% is easy to configure		The PD seems to reconsider that 10% may not be viable.
45	UnivBdev4	2:27:37 PM	so is everyone okay with level one	Strat	The DD responds to UR's question with a double-voiced question. On the one hand, this question demands a response, and is therefore

					authoritarian. On the other hand, it invites participation from the group, and so is egalitarian.
4 6	UnivBpers4	2:27:42 PM	no, someone must reach higher	Disagree	PD asserts the view that someone must be above a level 1
4 7	UnivBdev4	2:27:43 PM	that 10%		
4 8	UnivBUR4	2:27:44 PM	100 bucks		
4 9	UnivBpers4	2:27:48 PM	i think		
5 0	UnivBpers4	2:27:58 PM	we can always disperse the money after	Strat	PD asserts that the money can be divided later, supporting the earlier argument that not all be at level 1
5 1	UnivBpers4	2:28:01 PM	if we want		
5 2	UnivBfin4	2:28:06 PM	we should do more than level 1	Strat	In the Reflection Period, DF commented on this statement by saying, " here, my group is irritating me because they won't work, all they talk about is winning. i feel that this part of negotiations has not been sucessful because too much energy is being spent on what level we should be on and not actual work.
5	UnivBdev4	2:28:10 PM	yeah	Agree	

3					
5 4	UnivBdev4	2:28:23 PM	ok thois simp;le 10% pay cut accross the board?		
5 5	UnivBdev4	2:28:27 PM	can everyone do that	Inqabil ity	DD continues asking about the 10 pct pay cut, even after UR said that he could not.
5 6	UnivBfin4	2:28:30 PM	yes	Agree	FD is quick to agree with the proposal he/she made earlier
5 7	UnivBdev4	2:28:30 PM	expalint he 100 bucks	Rules	DD asks for an explanation of the rules
5 8	UnivBdev4	2:28:32 PM	ur	Directi ng	And directs UR to respond
5 9	UnivBUR4	2:28:36 PM	no all around is impossible, management must get a bigger paycurt	Statepr of	UR still does not reveal his level 1 goals, but states info from his role profile.
6 0	UnivBUR4	2:28:45 PM	100 bucks was reall money	Rules	UR mentions the prize money
6 1	UnivBfin4	2:28:51 PM	what about 16% for managemnt	Propos prof	FD proposes a cut based on his/her opening position, \$5K for mgrs.
6 2	UnivBdev4	2:28:52 PM	ok lets cut managment by 12%	Compr omise	DD offers a compromise to UR's requirement that management get a bigger cut
6 3	UnivBdev4	2:28:58 PM	ok 16 is fine	Agree	DD concurs with FD's offer
6 4	UnivBpers4	2:29:04 PM	yeah 12% is better	Agree	Belatedly, DP concurs with DD's proposal. During the Reflection Period, DP commented on this statement by

					saying, "i felt that this was a good idea to not cut 16% b/c it would have been too great of a cut for our team. i chose to respond this way so that we could negotiate a little better be offereing a middle value that would be good for everyone."
6 5	UnivBpers4	2:29:21 PM	we are not supposed to cut any managers in my dept thoug	Statepr of	DP's statement is drawn from the profile which says, "You want to keep all three managers in your own department."
6 6	UnivBpers4	2:29:22 PM	that		
6 7	UnivBfin4	2:29:22 PM	so 10% all, 16% managemnt	Propos prof	DF reiterates a proposal based on Finance's opening position.
6 8	UnivBUR4	2:29:27 PM	no	Disagr ee	UR disagrees because this does not meet UR's level 1 goals.
6 9	UnivBdev4	2:29:31 PM	12%	Compr omise	DD repeats his compromise, reading a different meaning behind the "no".
7 0	UnivBfin4	2:29:34 PM	no, cutting pay, not positions	Clarify	DF also reads a different meaning into the "no" and clarifies
7 1	UnivBdev4	2:29:37 PM	see where that puts us	Directi ng	DD directs an analysis
7 2	UnivBdev4	2:29:46 PM	then we can go to 16%	Altern	DD offers an alternative

7 3	UnivBdev4	2:29:48 PM	if needed		
7 4	UnivBdev4	2:30:08 PM	but level 2 for me is just under 20%	Linklevel2	DD states his level 2 salary cut
7 5	UnivBdev4	2:30:08 PM	what is it for everyone else	Inqlevel	DD inquires into others goal levels
7 6	UnivBUR4	2:30:41 PM	level 2 is under 5% for reg workers	Linklevel2	UR states part of his level 2 goal... "retain either all 100 regular employee jobs with less than a 7% cut in wages OR 95 jobs with less than a 5% cut in wages",
7 7	UnivBUR4	2:30:53 PM	but we can fire 5	Linklevel2	And UR states another part here.
7 8	UnivBdev4	2:31:00 PM	ok heres what we'll do	Directing	DD is directing the action again
7 9	UnivBfin4	2:31:01 PM	what if every dept. drops one manager,	Proposlevel2	FD makes a proposal from level 2 goals
8 0	UnivBfin4	2:31:01 PM	and has a 12% pay cut	Compromise	FD links the proposal to a compromise
8 1	UnivBpers4	2:31:08 PM	ok	Agree	PD agrees
8 2	UnivBdev4	2:31:10 PM	lets infd a way to make everyone happy	Unity	DD calls for unity
8 3	UnivBfin4	2:31:12 PM	that leaves you with 2 managers in each dept	Clarify	FD clarifies
8 4	UnivBdev4	2:31:21 PM	mark you stay at level one	Directing	DD directs the UR
8 5	UnivBdev4	2:31:28 PM	cause 200 thousand is too important	Clarify	And states his reason. His reference to 200K implies a 10 percent salary cut for regular employees, which is not possible for the UR. The level one goal



					of the UR has not been explicitly stated, though earlier the UR said he couldn't do a 10 percent cut.
8 6	UnivBUR4	2:31:46 PM	what do i need to do	Comply	UR's first reaction is to comply and ask for direction.
8 7	UnivBdev4	2:31:53 PM	we will split the money evenly	Rules	DD is assuring UR that he will not be penalized by a smaller portion of the prize money by doing what he directs.
8 8	UnivBUR4	2:31:58 PM	cant	Disagree	UR disagrees.
8 9	UnivBdev4	2:32:08 PM	your right	Agree	DD agrees
9 0	UnivBUR4	2:40:23 PM	the winner will be the one who doesnt have team members competing for a higher level	Strat	UR notes that the highest level will be gained by someone in a non-competitive situation.
9 1	UnivBdev4	2:40:30 PM	yes exactly	Agree	DD agrees
9 2	UnivBfin4	2:40:35 PM	okay, where are we so far?	InqInfo	DF inquires about the decision made
9 3	UnivBdev4	2:40:42 PM	ok so lets keep the 10% pay cut	Propos prof	DD reiterates the proposal from the opening position, still not having been explicitly made aware of UR's level 1 goals.
9 4	UnivBUR4	2:40:47 PM	i cant split the money evenly or iwe lose	Propos prof	UR seems to be basing this on his profile statement, <b>"You will absolutely refuse to accept a</b>

					<b>straight percentage decrease in wages across the board”.</b>
95	UnivBdev4	2:40:48 PM	16% for managers	Propos prof	DD repeats the FD’s opening position (also stated in profile info).
96	UnivBfin4	2:40:50 PM	sounds good	Agree	DF agrees
97	UnivBUR4	2:40:52 PM	no	Disagree	But UR disagrees
98	UnivBdev4	2:40:53 PM	i just did the math		
99	UnivBdev4	2:41:08 PM	that brings us to 243,200	Calc	DD runs the numbers
100	UnivBdev4	2:41:10 PM	ok why no	Inqreaso	DD inquires into why UR says no.
101	UnivBpers4	2:41:14 PM	if we only cut one manager from each dept then i read level 2 if we keep 90 employees	StateLevel2	DP hearkens back to the proposal at 2:31 PM and partly states the level 2 goal, “retain at least 5 managers total”, though miss-stating the retention goal “, retain at least 95 regular employee jobs” (90 is level 1 for Personnel).
102	UnivBUR4	2:41:24 PM	level 1 says less than 9% if we keep all 100 employes	StateLevel1	UR states part of his level 1 goal explicitly
103	UnivBUR4	2:41:36 PM	or		
104	UnivBUR4	2:41:49 PM	95 employees less than 7%	StateLevel1	Then UR states the other part. These appear in response to DD’s inquiry.
100	UnivBfin4	2:41:54 PM	can we cut managers and decrease the pay?	InqInfo	DF asks for info about potential

5					actions
1 0 6	UnivBdev4	2:42:03 PM	yes	Agree	DD agrees
1 0 7	UnivBUR4	2:42:03 PM	yes were supposed to	Agree	UR agrees
1 0 8	UnivBpers4	2:42:07 PM	yeah def	Agree	DP agrees
1 0 9	UnivBUR4	2:42:24 PM	remaining 6 mang reduce to 25000	Propos prof	UR checks with proposal to cut manager salaries.
1 1 0	UnivBfin4	2:42:33 PM	let		
1 1 1	UnivBfin4	2:42:41 PM	good	Agree	FD agrees
1 1 2	UnivBUR4	2:42:44 PM	directers pay cut to 30000	Propos prof	UR proposes Director cuts from budget info sheet.and UR's opening position
1 1 3	UnivBdev4	2:42:49 PM	the only problem with cutting		
1 1 4	UnivBfac24	2:42:51 PM	are you all in agreement?	Inqagr ee	Facilitator checks for agreement
1 1 5	UnivBdev4	2:42:54 PM	is the loss in productivuy	Statepr of	DD states info mentioned in the budget sheet.
1 1 6	UnivBUR4	2:43:10 PM	i can save us over 260000	Statepr of	UR repeats statements in UR opening position
1 1 7	UnivBdev4	2:43:13 PM	i need 35k to stay in level one	Linkle vell	DD explicitly cites a level 1 goal.
1 1 8	UnivBpers4	2:43:24 PM	directors payout can't be that much	Disagr ee	DP disagrees with DD's statement
1	UnivBdev4	2:43:30 PM	so lets keep me at	Directi	DP directs group to

1 9			35k	ng	keep his salary at 35K
1 2 0	UnivBfin4	2:43:35 PM	its 30k	Statepr of	DF repeats info from the budget, "reduce Directors' salaries (down to a <b>minimum</b> of \$30,000)"
1 2 1	UnivBpers4	2:43:35 PM	it has to be 40000	Disagr ee	DP continues to disagree
1 2 2	UnivBUR4	2:43:39 PM	for level 1?	Clarify	UR asks DD to clarify his goal level.
1 2 3	UnivBdev4	2:43:53 PM	yeah	Agree	DD agrees.
1 2 4	UnivBfin4	2:43:54 PM	40k off directors pay?	Clarify	DF seeks clarification
1 2 5	UnivBpers4	2:44:08 PM	40k is the new salary from 50k	Clarify	DP clarifies his position
1 2 6	UnivBdev4	2:44:09 PM	no eahc director now makes 40k	StateL evel2	DD supports the 40K number, which is a level 2 goal of his (, retain own position with <b>less than a 20% cut in pay</b> (\$10,000),)
1 2 7	UnivBpers4	2:44:12 PM	yeah	Agree	DP agrees
1 2 8	UnivBUR4	2:44:13 PM	ya	Agree	UR agrees
1 2 9	UnivBdev4	2:44:15 PM	ok good	Agree	DD agrees
1 3 0	UnivBdev4	2:44:22 PM	so we saved 90k	Calc	And calculates savings
1	UnivBpers4	2:44:24 PM	25 is good for	Agree	DP agrees with

3 1			managers		proposal of 2:42 PM
1 3 2	UnivBdev4	2:44:29 PM	plus 10% all around pay cut	Propos prof	DD repeats the proposal of a 10 percent cut.
1 3 3	UnivBUR4	2:44:36 PM	no	Disagree	UR repeats his disagreement
1 3 4	UnivBfin4	2:44:36 PM	so that's 290k	Calc	DF calculates savings
1 3 5	UnivBdev4	2:44:53 PM	okay whats the max we can cut reg workers by	Inqabil ity	DD inquires about UR's limits to action
1 3 6	UnivBfin4	2:44:55 PM	what's wrong with the 10%, what do you think	Inqrea son	And DF inquires as to why. During the Reflection Period, DF commented on this question by saying, "i wish UR would be more clear on why the paycuts wouldn't work"
1 3 7	UnivBdev4	2:44:56 PM	mark	Directi ng	DD directs UR to respond
1 3 8	UnivBUR4	2:44:59 PM	: level 1 says less than 9% if we keep all 100 employeesUnivBUR4 2:41:30 PM orUnivBUR42:41:43 PM 95 employees less than 7%	Linkle vell1	UR cuts and pastes his previous statement of goal level 1
1 3 9	UnivBUR4	2:45:16 PM	your choice	Altern	UR gives a choice between the two alternatives
1 4 0	UnivBpers4	2:45:18 PM	what about 90 employess	Propos level1	DP recites Personnel level 1 goals, ", retain at least 90 regular employee jobs,"

1 4 1	UnivBUR4	2:45:20 PM	no	Disagree	UR disagrees
1 4 2	UnivBpers4	2:45:21 PM	what rate	Clarify	DP seeks clarifying info
1 4 3	UnivBUR4	2:45:23 PM	read it	Directing	UR tells DP to read what was just written
1 4 4	UnivBpers4	2:45:29 PM	i don't have that info	Rules	DP notes that each profile is different. During the Reflection Period, DP commented on this statement by saying, "i felt like they thought i knew all the info but i don't and they need to realize that. also i felt dumb for not realizing that they were telling me that that's what needed to be accomplished."
1 4 5	UnivBfin4	2:45:37 PM	no one else has it	Rules	DF notes that each profile is different
1 4 6	UnivBUR4	2:45:45 PM	no read what i wrote	Directing	UR directs others to read the level 1 goals written earlier
1 4 7	UnivBpers4	2:45:56 PM	when	InqInfo	DP asks when
1 4 8	UnivBdev4	2:46:01 PM	lets cut 5 employees	Directing	DD directs the team to a decision about layoffs
1 4 9	UnivBpers4	2:46:07 PM	oh ok	Comply	DP complies
1 5	UnivBfin4	2:46:07 PM	well we can't keep all 100 emps	Comply	DF makes a statement implying

0					compliance. During the Reflection Period, DF commented on this statement by saying, "i wanted to open discussion on which managers can be let go".
151	UnivBdev4	2:46:07 PM	and take 7%	Directing	DD directs the team to a decision about pay cuts
152	UnivBUR4	2:46:12 PM	fine	Agree	UR agrees
153	UnivBdev4	2:46:13 PM	figure that	Directing	DD directs a calculation be done
154	UnivBpers4	2:46:14 PM	how much is that	InqInfo	DP asks how much that comes to
155	UnivBdev4	2:46:20 PM	thats 100k plus	Calc	Calculation results
156	UnivBfin4	2:46:21 PM	okay, which employees	Clarify	DF seeks clarification
157	UnivBUR4	2:46:36 PM	is that better or = to keep 100 and cut 9%	Altern	UR considers alternatives
158	UnivBUR4	2:46:43 PM	workers		
159	UnivBdev4	2:46:44 PM	7 percent of 1.9 mil	Calc	Calculation results
160	UnivBdev4	2:46:51 PM	lets figure it	Directing	DD directs more calculations
161	UnivBdev4	2:47:17 PM	133+100 equals	Calc	Calculation results
1	UnivBdev4	2:47:20 PM	233k	Calc	Calculation results

6 2					
1 6 3	UnivBdev4	2:47:26 PM	on regular personal	Clarify	DD clarifies
1 6 4	UnivBdev4	2:47:33 PM	then we'll whack some managers	Directing	DD directs the team to the next topic.
1 6 5	UnivBdev4	2:47:38 PM	1 from each dep	Propos level2	Both DD and DF have level 2 goals stating they keep 2 managers in their department.
1 6 6	UnivBfin4	2:47:41 PM	okay, which managers are we gonna get rid of	Clarify	DF seeks clarification
1 6 7	UnivBdev4	2:47:42 PM	is that ok?	Inqagree	DD checks for agreement
1 6 8	UnivBfin4	2:47:46 PM	what about 2	Propos level1	DF makes a proposal from Finance level 1 goal of keeping one manager per department.
1 6 9	UnivBfin4	2:47:53 PM	no, nevermind	Disagree	And then retracts it.
1 7 0	UnivBpers4	2:47:55 PM	no, one only	Disagree	DP suggests only one, this would allow DP to meet the level 2 goal of keeping 5 managers. During the Reflection Period, DP commented on this statement by saying, "right here i anticipated that he may ask about cutting two managers and i



					wrote only one. this way we could cut money instead of people."
1 7 1	UnivBUR4	2:47:59 PM	are we bringing other managers down to 25 k	Clarify	UR seeks to clarify the decisions that have been made.
1 7 2	UnivBfin4	2:48:02 PM	yes	Agree	Others agree
1 7 3	UnivBpers4	2:48:04 PM	yea	Agree	Others agree
1 7 4	UnivBfin4	2:48:07 PM	both	Agree	Others agree
1 7 5	UnivBdev4	2:48:10 PM	we cant	Disagree	DD disagrees
1 7 6	UnivBUR4	2:48:15 PM	and directers down as much as possible	Strat	UR offers a strategy for saving more money
1 7 7	UnivBdev4	2:48:23 PM	yeah we can	Agree	DD recants and agrees
1 7 8	UnivBdev4	2:48:25 PM	sorry		
1 7 9	UnivBdev4	2:48:30 PM	ok i can go to 35k	StateLevel	DD states info from his level one goals
1 8 0	UnivBdev4	2:48:36 PM	thats 15	Calc	DD reveals how much money that saves
1 8 1	UnivBpers4	2:48:39 PM	for director?	Clarify	DP seeks clarification
1 8 2	UnivBdev4	2:48:40 PM	finance keep tally	Directing	DD directs DF to track savings
1 8 3	UnivBdev4	2:48:48 PM	we are at 233 with the personall changes	Calc	DD states calculations

1 8 4	UnivBUR4	2:48:56 PM	we need more!	Clarify	UR believes the 233K is not enough
1 8 5	UnivBdev4	2:48:57 PM	i can take a 15k cut	StateLevel1	DD reiterates level 1 info
1 8 6	UnivBdev4	2:49:07 PM	what can other directors take	Inqability	DD asks what others can do.
1 8 7	UnivBUR4	2:49:08 PM	we need OVER 260000	Rules	UR reminds the team that 260K is only the break even point.
1 8 8	UnivBUR4	2:53:27 PM	if		
1 8 9	UnivBUR4	2:58:31 PM	if my props were all followed i could save us over 320k	Calc	During Reflection period, UR calculated new savings.
1 9 0	UnivBdev4	2:58:31 PM	these changes bring us to 398k	Calc	DD states what he believes the savings to be
1 9 1	UnivBdev4	2:58:43 PM	now we need to figure out the productivity loses	Directing	DD directs the conversation to what he sees as the next step.
1 9 2	UnivBfin4	2:58:48 PM	what are they	InqInfo	DF inquires about productivity
1 9 3	UnivBUR4	2:59:01 PM	but isnt all that matters money saved?	Rules	UR questions how the game works
1 9 4	UnivBfac24	2:59:03 PM	what more can you guys do? does anyone have any ideas?	Inqability	The facilitator asks what can be done.
1 9 5	UnivBdev4	2:59:12 PM	ok here it goes		
1 9 6	UnivBdev4	2:59:17 PM	7% pay cut	Repeat	DD reiterates previous decisions

1 9 7	UnivBpers4	2:59:18 PM	wait, how can you save 320k	Clarify	DP responds to UR's previous statement
1 9 8	UnivBdev4	2:59:19 PM	133k	Calc	DD calculates savings
1 9 9	UnivBdev4	2:59:30 PM	3 mangers gone	Repeat	DD reiterates decisions
2 0 0	UnivBdev4	2:59:31 PM	90k	Calc	DD calculates savings
2 0 1	UnivBUR4	2:59:39 PM	it will take a while ill type it		
2 0 2	UnivBpers4	2:59:47 PM	ok		
2 0 3	UnivBdev4	3:00:00 PM	additionall managers salaries falling to 25k	Repeat	DD reiterates decisions
2 0 4	UnivBdev4	3:00:12 PM	each director falling to 35k	Repeat	DD reiterates decisions
2 0 5	UnivBdev4	3:00:16 PM	but we cant can we	Inqabil ity	DD asks if others can reduce their salary that much
2 0 6	UnivBdev4	3:00:18 PM	mine can	Agree	DD agrees
2 0 7	UnivBpers4	3:00:22 PM	yes	Agree	DP agrees
2 0 8	UnivBpers4	3:00:24 PM	mine can too		
2 0 9	UnivBUR4	3:00:25 PM	that 90k + 6 remain mangs to 25k 30k)	Calc	UR calculates savings
2 1 0	UnivBdev4	3:00:26 PM	who else can	Inqabil ity	DD inquires about what others can do
2	UnivBfin4	3:00:26 PM	yes	Agree	DF agrees

1					
1					
2	UnivBdev4	3:00:41 PM	those changes i just said bring us to 398k	Calc	DD calculates savings
1					
2	UnivBfin4	3:00:45 PM	so far, i'm all set with all of those	Agree	DF responds to DD's inquiry
1					
3					
2	UnivBdev4	3:00:50 PM	but then we have some losses to deal with	Directing	DD returns to directing the conversation toward losses
1					
4					
2	UnivBUR4	3:00:53 PM	+diresters cut to 30 k 60k)	Propos prof	UR makes his suggestions, based on his opening position, " salaries of the three directors should be reduced to \$30,000 each"
1					
5					
2	UnivBpers4	3:01:04 PM	ok	Agree	DP agrees
1					
6					
2	UnivBdev4	3:01:10 PM	i can only cut to 25k		
1					
7					
2	UnivBdev4	3:01:15 PM	35k	StateLevel1	DD repeats one of his level one requirement
1					
8					
2	UnivBUR4	3:01:15 PM	+ 5 workers fired and the rest 7% cut	Repeat	UR repeats the decision made previously
1					
9					
2	UnivBdev4	3:01:16 PM	i mean		
2					
0					
2	UnivBdev4	3:01:22 PM	yes	Agree	DD agrees
2					
1					
2	UnivBpers4	3:01:26 PM	do we have to worry about will people work for this or not	Rules	DP asks about the way the game works
2					
2					
2	UnivBpers4	3:01:39 PM	it doesn't matter right?		

3					
2 2 4	UnivBdev4	3:01:43 PM	yes we do, but it says they do	Rules	DD responds to DP's question
2 2 5	UnivBUR4	3:01:45 PM	im supposed to go on strike	Statepr of	UR repeats from his profile, " <i>IF LEVEL 1 GOALS CANNOT BE MET, YOU WILL IMMEDIATELY CALL A STRIKE</i> "
2 2 6	UnivBdev4	3:01:47 PM	no doesn't matter		
2 2 7	UnivBUR4	3:01:53 PM	if my needs arent meant		
2 2 8	UnivBdev4	3:01:59 PM	all that matters is that mark demands are met	Clarify	DD clarifies UR's statements
2 2 9	UnivBdev4	3:02:03 PM	cause he represents them		
2 3 0	UnivBfac24	3:02:03 PM	what are your needs?	Clarify	Facilitator seeks clarification
2 3 1	UnivBdev4	3:02:13 PM	the 7& 95 thing	Repeat	DD repeats the previous decision
2 3 2	UnivBdev4	3:02:17 PM	right		
2 3 3	UnivBdev4	3:02:19 PM	thats it		
2 3 4	UnivBfin4	3:02:22 PM	well that do it	Agree	DF agrees
2 3 5	UnivBdev4	3:02:26 PM	ok hes all squared away		
2 3	UnivBUR4	3:02:29 PM	ya + management loses more than	Repeat	UR repeats his previous statement

6			workes		from his profile, "managers and directors must accept a greater percentage of pay cuts than the regular employees"
2 3 7	UnivBUR4	3:02:33 PM	workers		
2 3 8	UnivBdev4	3:02:47 PM	i am all squared away wirth losing one maganer and taking a salary of 35k	Repeat	DD repeats his approval of a previous decision
2 3 9	UnivBdev4	3:02:56 PM	and cutting my direcotrs to 25 k	Repeat	DD repeats more approval
2 4 0	UnivBUR4	3:02:57 PM	1 manager in each	Clarify	UR seeks clarification
2 4 1	UnivBUR4	3:03:04 PM	right?		
2 4 2	UnivBdev4	3:03:05 PM	lets go around and see if everyone els eis all set with this	Inqagre	DD checks for agreement
2 4 3	UnivBdev4	3:03:09 PM	yes		
2 4 4	UnivBfin4	3:03:12 PM	let's keep 2 managers in a each	Repeat	DF repeats the "fire one manager per dept" as a proposal to keep two (in DF's profile as a level 2 goal), apparently unaware that there is no difference
2 4 5	UnivBpers4	3:03:22 PM	hey, my first thing is to merge the finance and development groups and cut one of those directors	Propos prof	DP proposes merging, stated in Personnel's opening position.

2 4 6	UnivBdev4	3:03:27 PM	i dont think we should cut finance managers	Disagree	DD disagrees
2 4 7	UnivBpers4	3:03:29 PM	but i don't think i have to do that	Clarify	DP says merging is not a requirement
2 4 8	UnivBUR4	3:03:30 PM	as long as were down to 6 managers	Repeat	UR repeats the decision to fire 3 managers
2 4 9	UnivBdev4	3:03:37 PM	that takes 20k out	Calc	DD calculates costs of cuts
2 5 0	UnivBUR4	3:03:42 PM	we have to		
2 5 1	UnivBfac24	3:03:43 PM	what do each fo you need to be ok?	InqInfo	Facilitator needs more information
2 5 2	UnivBdev4	3:03:43 PM	of revenues		
2 5 3	UnivBdev4	3:03:51 PM	i already told mine	Repeat	DD says he has stated his goals
2 5 4	UnivBfin4	3:03:52 PM	i cannot merge	StateLevel	DF's level one states ", retain your own position"
2 5 5	UnivBUR4	3:03:54 PM	exactly	Agree	UR agrees
2 5 6	UnivBUR4	3:04:07 PM	lets be the bare min of level1	Strat	UR suggests that everyone be at level 1. This advocates equality, since he has already agreed to be at level 1.
2 5 7	UnivBdev4	3:04:11 PM	yes	Agree	DD agrees, since he has revealed most of his level 1 goals (retain 95 regular employees, retain one manager in Development,

					retain own position (with a minimum salary of \$35,000), achieve budget surplus and re-invest that surplus into PROJECTS)
258	UnivBdev4	3:04:18 PM	ok mark has been met	Repeat	DD repeats his approval of previous decisions
259	UnivBdev4	3:04:23 PM	what are your mins	Inqlevel	DD inquires about level 1 requirements
260	UnivBdev4	3:04:25 PM	lindsya	Directing	DD directs Lindsey to respond
261	UnivBdev4	3:04:27 PM	i have been met	Clarify	DD states his goals have been met, but did not explicitly state them completely, since he has left out the "retain ONE manager in development" goal". He is not at min, but seems to want to give that perception.
262	UnivBUR4	3:04:30 PM	remeber ITS NOT 7% cut its 6.9!!	Clarify	UR clarifies the specifics of his Level 1 goals.
263	UnivBdev4	3:04:40 PM	what about you tom	Directing	DD directs tom, the DP, to respond.
264	UnivBdev4	3:04:41 PM	ok		
265	UnivBpers4	3:04:44 PM	ok, tom is met easily as long as we keep3 managers	Linklevel1	DP states one of his level one goals.( retain your own position, retain at least 90 regular



					employee jobs, retain at least 3 managers total)
2 6 6	UnivBdev4	3:04:48 PM	not a big deal	Agree	DD agrees
2 6 7	UnivBUR4	3:04:58 PM	why dont we fire more managers than	Altern	UR suggests an alternative, since DP is not yet at level 1
2 6 8	UnivBfin4	3:04:58 PM	retain position and dept, retain 1 manager, i need a budget surplus	Linklevel1	DF states Finance level 1 goals
2 6 9	UnivBpers4	3:05:07 PM	we can't cut any directors?	Inqability	DP questions the "retain position" requirement
2 7 0	UnivBpers4	3:05:16 PM	or we just don't want to	Clarify	DP seeks clarification
2 7 1	UnivBfin4	3:05:21 PM	i think we can	Clarify	DF states beliefs about firing directors
2 7 2	UnivBdev4	3:05:24 PM	i cant be cut	Linklevel1	DD states info from his level 1
2 7 3	UnivBUR4	3:05:26 PM	but give them lowest poss pay	Directing	UR directs giving the directors the lowest possible salary
2 7 4	UnivBpers4	3:05:39 PM	ok like what	Clarify	DP is unsure what the lowest salary is, though the min is stated as \$30K in the budget info.
2 7 5	UnivBfin4	3:05:41 PM	40k?	Propos prof	DF suggests 40K, which is part of Finance opening position
2 7 6	UnivBpers4	3:05:47 PM	ok	Agree	DP agrees
2	UnivBdev4	3:05:49 PM	mine is 35k	StateL	DD repeats his min

7 7				evel1	requirement.
2 7 8	UnivBdev4	3:05:53 PM	what si eveyrone elses	Inqlev el	DD repeats his request for minimum levels, this time focussing on the Director salaries.
2 7 9	UnivBUR4	3:05:53 PM	fin person you noticed workers get <b>LESS THAN 7%</b>	Repeat	UR appears confused, and repeats the workers requirements.
2 8 0	UnivBUR4	3:06:05 PM	what do you mean 40k?	Inqrea son	UR requests that DF explain his statement.
2 8 1	UnivBfin4	3:06:05 PM	6.9?	Clarify	
2 8 2	UnivBUR4	3:06:08 PM	ya	Agree	UR agrees
2 8 3	UnivBdev4	3:06:23 PM	the new salary for managers	Clarify	DD clarifies what the 40K applies to.
2 8 4	UnivBfin4	3:06:26 PM	40k for dir. pay	Clarify	As does DF
2 8 5	UnivBpers4	3:06:28 PM	mine can't be less than 35k	Statepr of	DP uses a statement from opening position... "You are willing to tolerate reasonable salary cuts in your department <b>as long as they are equal to the cuts in other departments' salaries'</b> rather <b>than level 1</b>
2 8 6	UnivBUR4	3:06:30 PM	why ?	Inqrea son	UR inquires as to why
2	UnivBdev4	3:06:35 PM	mine cant either	StateL	DD repeats his

8 7				evel1	level 1 goal
2 8 8	UnivBUR4	3:06:35 PM	do minums	Directi ng	UR directs them to do minimums
2 8 9	UnivBdev4	3:06:39 PM	i am	Compl y	DD complies
2 9 0	UnivBpers4	3:06:44 PM	ok, mine's 35k	Statepr of	DP restates his opening info
2 9 1	UnivBfac24	3:06:44 PM	what are the minimums?	Clarify	Facilitator is unclear about what is meant by minimums
2 9 2	UnivBdev4	3:06:59 PM	so can every get paid 35k	Inqabil ity	DD requests info about other's ability to go to 35K.
2 9 3	UnivBdev4	3:07:00 PM	?		
2 9 4	UnivBfin4	3:07:10 PM	here's the thing though, i need to have a surplus	Statepr of	DF states info from his profile, valid at all levels.
2 9 5	UnivBdev4	3:07:15 PM	ok	Agree	DD agrees
2 9 6	UnivBdev4	3:07:25 PM	so we dont cut any finance managers	Clarify	DD clarifies his understanding of DF's statement
2 9 7	UnivBUR4	3:07:31 PM	tiny surplus hopefully		
2 9 8	UnivBdev4	3:07:33 PM	cuase their too valubale anyway	Rules	DD might be basing this on the budget, which states that each Fin mgr saves 20K per year, more than any other manager
2 9 9	UnivBUR4	3:07:38 PM	we have to cut 1	Repeat	This was decided earlier

3 0 0	UnivBpers4	3:07:41 PM	i think so too	Agree	DP agrees
3 0 1	UnivBfin4	3:07:46 PM	one is fine	Agree	DF agrees
3 0 2	UnivBdev4	3:08:04 PM	so we have to increase finance by 60k	Clarify	DD seeks to clarify his understanding of this info.
3 0 3	UnivBdev4	3:08:10 PM	is that what im LOOKING AT		
3 0 4	UnivBfin4	3:08:36 PM	new salaries for mamagers are going to be what?>	Clarify	DF seeks to clarify what has been decided. During the Reflection Period, DF commented on this question by saying, "i want to make sure everyone knows what is going on because i think there is some confusion".
3 0 5	UnivBdev4	3:08:42 PM	35k	Repeat	DD states the Directors salary that was decided.
3 0 6	UnivBUR4	3:08:50 PM	no 30k	Statepr of	UR states info from his opening position, " The salaries of the three directors should be reduced to \$30,000"
3 0 7	UnivBdev4	3:08:53 PM	cant	Disagr ee	DD disagrees, since his Level 1 goal is 35K for his own salary.
3 0 8	UnivBUR4	3:09:02 PM	25k	Repeat	UR repeats the decision for MANAGER's salary made earlier.
3	UnivBdev4	3:09:43 PM	mangers yeah 25k	Agree	DD agrees

0 9					
3 1 0	UnivBUR4	3:10:10 PM	yea my thing says cut the remaining 6 from 30k to 25k	Statepr of	UR states info from his opening position
3 1 1	UnivBdev4	3:10:28 PM	yes	Agree	DD agrees
3 1 2	UnivBUR4	3:14:24 PM	fyi if management cuts are not greater % than workers we lose	Statepr of	UR states info from the opening position, "the managers and directors must accept a greater percentage of pay cuts than the regular employees"
3 1 3	UnivBUR4	3:17:04 PM	the team that wins will have all 1s	Strat	UR states a belief about the way to win
3 1 4	UnivBdev4	3:17:19 PM	Ok i am going to say what i have done to get to 398k, everyone say if any of this conflicts with their level one requirements only speak up if it does, ok?	Directi ng	DD decides what to do and tells the rest of the team what to do.
3 1 5	UnivBpers4	3:17:24 PM	hey we need to talk about our budget	Altern	DP has a different suggestion
3 1 6	UnivBdev4	3:17:30 PM	its actually 396100	Calc	DD's savings number
3 1 7	UnivBfin4	3:17:45 PM	alright	Agree	DF agrees
3 1 8	UnivBdev4	3:17:48 PM	cut pay by 6.9% for workers	Repeat	DD repeats decisions
3 1	UnivBpers4	3:17:48 PM	yeah, it doesn't matter about the actual value	Agree	DP agrees

9			though		
3 2 0	UnivBUR4	3:17:55 PM	go	Directing	UR directs DD to continue
3 2 1	UnivBdev4	3:17:57 PM	los 5 workers	Repeat	DD repeats decisions
3 2 2	UnivBpers4	3:18:01 PM	about our budget?	InqInfo	DP inquires about the budget
3 2 3	UnivBdev4	3:18:08 PM	cut 1 manager from each dep	Repeat	DD repeats decisions
3 2 4	UnivBdev4	3:18:26 PM	reduce director salaries to 35k	Repeat	DD repeats decisions
3 2 5	UnivBfin4	3:18:38 PM	what are we going to do with this surplus? More money in the projects budget	Strat	DF questions the strategy for using the surplus
3 2 6	UnivBdev4	3:18:40 PM	remaining mangers make 30k	Repeat	DD repeats the decision, incorrectly, since it had been decided to make them 25K
3 2 7	UnivBUR4	3:18:44 PM	problem w/ something else	Altern	UR begins to raise an issue
3 2 8	UnivBpers4	3:18:48 PM	yes all good, i'm filling out the sheet now	Agree	DP agrees
3 2 9	UnivBUR4	3:18:52 PM	nevermind		
3 3 0	UnivBpers4	3:19:00 PM	managers make 30k?	Clarify	DP questions the misstatement
3 3 1	UnivBdev4	3:19:06 PM	ok we are going to distribute some of it to finance	Directing	DD responds to the budget issue by deciding what to do
3 3 2	UnivBdev4	3:19:12 PM	since they need a surplus		

3 3 3	UnivBfin4	3:19:15 PM	we only have to fill out one sheet rihgt	Rules	DF inquires about what needs to be done.
3 3 4	UnivBUR4	3:19:16 PM	i thought it was 25	Clarify	UR seeks to clarify their misstatement
3 3 5	UnivBdev4	3:19:19 PM	managers make 25k	Repeat	DD restates the decision properly
3 3 6	UnivBUR4	3:19:22 PM	ya	Agree	UR agrees
3 3 7	UnivBpers4	3:19:22 PM	ok	Agree	DP agrees
3 3 8	UnivBpers4	3:19:24 PM	good		
3 3 9	UnivBpers4	3:19:28 PM	what to finance	Clarify	DP questions previous statements
3 4 0	UnivBfin4	3:19:33 PM	surplus		
3 4 1	UnivBdev4	3:19:44 PM	ok we have to figure out how much moeny we are going to lose in productivity	Directing	DD directs the group to the next decision.
3 4 2	UnivBdev4	3:19:46 PM	with these changes		
3 4 3	UnivBpers4	3:19:53 PM	ok	Agree	DP agrees
3 4 4	UnivBdev4	3:19:58 PM	cause those are the rules they gave us	Clarify	DD clarifies his reasoning
3 4 5	UnivBUR4	3:19:59 PM	what about directers cut	Altern	UR raises an alternative
3 4 6	UnivBdev4	3:20:02 PM	who wants to do it	Inqagree	DD checks for agreement

3 4 7	UnivBfin4	3:20:10 PM	i do	Agree	DF agrees
3 4 8	UnivBdev4	3:20:13 PM	directors cut is 15k per year	Repeat	DD repeats the decision made
3 4 9	UnivBfin4	3:20:23 PM	great		
3 5 0	UnivBpers4	3:20:23 PM	no directors cut, only 35K is new salary	Clarify	DP clarifies what is meant by "cut"... not layoff, only salary reduction.
3 5 1	UnivBUR4	3:20:39 PM	not 30k?	Clarify	UR asks about the level of salary cut
3 5 2	UnivBdev4	3:20:50 PM	no sorry		
3 5 3	UnivBdev4	3:20:55 PM	im an idiot		
3 5 4	UnivBdev4	3:21:03 PM	directors cut is 5 per year	Repeat	DD repeats the MANAGER's salary cut info
3 5 5	UnivBdev4	3:21:10 PM	totaling a save of 30k per year	Calc	DD calculates savings
3 5 6	UnivBpers4	3:21:13 PM	yes, right	Agree	DP agrees
3 5 7	UnivBpers4	3:21:15 PM	there ya go		
3 5 8	UnivBUR4	3:21:19 PM	i know im just doing what my sheet says		
3 5 9	UnivBUR4	3:21:43 PM	im a union delegate damn it. no need to get defensive	Social	UR soothes perceived irritation.
3 6 0	UnivBdev4	3:21:45 PM	managers cut is 5k per year that rnbings them to 25k	Repeat	DD repeats manager salary decision



3 6 1	UnivBfin4	3:21:46 PM	so is everyone all set and the sheet is being filled out	Inqagr ee	DF checks for agreement
3 6 2	UnivBpers4	3:21:54 PM	ok, the percentage for regular employeess is 7% right?	Clarify	DP checks labor salary
3 6 3	UnivBdev4	3:21:55 PM	yes	Agree	DD agrees
3 6 4	UnivBdev4	3:21:58 PM	6.9	Repeat	DD repeats the corrected value.
3 6 5	UnivBUR4	3:22:03 PM	ya	Agree	UR agrees
3 6 6	UnivBpers4	3:22:06 PM	ok, good thing i asked		
3 6 7	UnivBUR4	3:22:07 PM	6.9	Repeat	UR repeats
3 6 8	UnivBdev4	3:22:15 PM	each manger is cut by 5k per year	Repeat	DD repeats the decision
3 6 9	UnivBdev4	3:22:20 PM	each director by 15k	Repeat	DD repeats decisions
3 7 0	UnivBfin4	3:22:28 PM	goods		
3 7 1	UnivBpers4	3:22:36 PM	that's all set, how much do we cut out of the budget	InqInf o	DP requests info about deciding how to set the budget
3 7 2	UnivBUR4	3:22:42 PM	most		
3 7 3	UnivBUR4	3:22:49 PM	im guessing	Clarify	UR guesses at the amount to put in the budget.
3 7 4	UnivBdev4	3:22:55 PM	well we are at 396100	Calc	DD makes calculations
3	UnivBfin4	3:22:56 PM	and is there a surplus	InqInf	DF asks about a

7 5				o	surplus
3 7 6	UnivBdev4	3:23:08 PM	so that is over 130k	Calc	DD makes calculations
3 7 7	UnivBUR4	3:23:10 PM	im not supposed to have a sheet right?	Rules	UR asks about the process
3 7 8	UnivBpers4	3:23:18 PM	no only tom has it	Clarify	DP clarifies the rules
3 7 9	UnivBfin4	3:23:18 PM	okay, i need some of that for the projects budget	Statepr of	DF states needs gathered from the profile sheet
3 8 0	UnivBdev4	3:23:23 PM	right	Agree	DD agrees
3 8 1	UnivBpers4	3:23:29 PM	how much is my question	InqInf o	DP asks how much
3 8 2	UnivBdev4	3:23:43 PM	hold on		
3 8 3	UnivBpers4	3:23:45 PM	ok		
3 8 4	UnivBUR4	3:23:49 PM	as little as possible hopefully		
3 8 5	UnivBfin4	3:23:56 PM	65k?		
3 8 6	UnivBpers4	3:24:09 PM	do we agree on that	Inqagr ee	DP checks for agreement
3 8 7	UnivBpers4	3:24:20 PM	or should we have more		
3 8 8	UnivBUR4	3:24:25 PM	i have no info on that		
3 8	UnivBpers4	3:24:37 PM	me either		

9					
3 9 0	UnivBdev4	3:24:38 PM	me niether		
3 9 1	UnivBdev4	3:24:47 PM	lets just put the changes we made	Directing	DD directs the action
3 9 2	UnivBUR4	3:24:56 PM	ok	Agree	UR agrees
3 9 3	UnivBpers4	3:25:05 PM	no change in project budget	Clarify	DP clarifies DD's suggestion
3 9 4	UnivBfin4	3:25:06 PM	alright	Agree	DF agrees
3 9 5	UnivBpers4	3:25:19 PM	yes, no change at all?	Inqagree	DP checks for agreement
3 9 6	UnivBdev4	3:25:21 PM	lets throw some in finance	Altern	DD suggests an alternative
3 9 7	UnivBdev4	3:25:23 PM	i think we need to	Stateprof	A possible source for this is DD's profile statement, " You also want to create a budget surplus which can then be re-invested into the PROJECTS budget"
3 9 8	UnivBdev4	3:25:28 PM	to maintain a surplus		
3 9 9	UnivBdev4	3:25:45 PM	lets thorw in another mananger	Altern	DD suggests changing the manager layoffs.
4 0 0	UnivBUR4	3:25:50 PM	no]	Disagree	UR disagrees
4 0 1	UnivBpers4	3:26:00 PM	no, that's all done	Disagree	DP disagrees

4 0 2	UnivBUR4	3:26:00 PM	we dont need another mang	Clarify	UR clarifies his reasoning
4 0 3	UnivBdev4	3:26:06 PM	we need to have a surplus in finance	Repeat	DD repeats previous decisions
4 0 4	UnivBdev4	3:26:12 PM	are we still dealing with that issue		
4 0 5	UnivBdev4	3:26:15 PM	linda	Directing	DD directs Linda to answer
4 0 6	UnivBfin4	3:26:18 PM	i don't think so		
4 0 7	UnivBUR4	3:26:21 PM	manager is not needed	Repeat	UR repeats info about needs.
4 0 8	UnivBdev4	3:26:23 PM	ok good		
4 0 9	UnivBpers4	3:26:27 PM	this sheet doesn't ask about that	Rules	DP looks at the final decision sheet
4 1 0	UnivBfin4	3:26:31 PM	as long as something can be invested into projects	Statepr of	DF notes that investment is needed from the profile sheet, "you want to create a <i>surplus</i> , which can then be added to the PROJECTS budget"
4 1 1	UnivBdev4	3:26:32 PM	ok fine then	Agree	DD agrees
4 1 2	UnivBdev4	3:26:41 PM	lets throw 30k into projects	Directing	DD decides what to do.
4 1 3	UnivBpers4	3:26:41 PM	i'm keeping the 100k into projects	Altern	DP offers an alternative
4	UnivBdev4	3:26:45 PM	ok fine	Agree	DD agrees

1 4					
4 1 5	UnivBfin4	3:26:50 PM	what's the deal w/ maagers, we're cutting 3	Clarify	DF seeks to clarify the manager decision.
4 1 6	UnivBdev4	3:26:53 PM	yeah	Agree	DD agrees
4 1 7	UnivBdev4	3:26:57 PM	one from each	Repeat	DD repeats the decision
4 1 8	UnivBfin4	3:27:00 PM	ok	Agree	DF agrees
4 1 9	UnivBpers4	3:27:05 PM	so 100k is final into projects	Repeat	DP repeats the proposal
4 2 0	UnivBUR4	3:27:11 PM	why not 90	Compr omise	UR offers a compromise
4 2 1	UnivBfin4	3:27:14 PM	130	Compr omise	DF offers a compromise
4 2 2	UnivBdev4	3:27:16 PM	say we didn't have aenopguh time to figure otu the productivty stuff	Directi ng	DD direacts the decision
4 2 3	UnivBUR4	3:28:36 PM	just do min	Directi ng	UR directs the decision

Conversation II (From Oct 29, 11 am, Team 1 - low profit)

L i n e #	Buddyname	Time	Dialogue	Summary	Comments
1	UnivBur1	12:34:13 PM	you thre	Social	Getting in touch
2	UnivBur1	12:34:17 PM	anyone ansering	Social	Getting in touch
3	UnivBdev1	12:34:17 PM	yeah	Social	Getting in touch
4	UnivBfin1	12:34:19 PM	ok i think we need to cutthe pay 10% for employees	Statepr of	Director of Finance (DF) begins with a statement from the opening position "An immediate 10% pay cut for regular employees"
5	UnivBchair1	12:34:23 PM	here	Social	The Chair is present
6	UnivBur1	12:34:27 PM	i think we need to fire linn	Min	The Union Representative (UR) suggests firing Linn, the Finance Director.
7	UnivBdev1	12:34:35 PM	i agree, that saves 200k	Agree	The Director of Development (DD) agrees with cutting labor wages ten percent.
8	UnivBchair1	12:34:36 PM	i don't think so	Disagree	Chair disagrees with firing linn.. During the Reflection Period, Chair had this to say about her response: "I responded to I don't think so because we

					don't need to fire an employee right off. If everyone cuts there wages then we can still save and work from there. We might end up having to fire someone, but if we gradually get there, all people will be happy for the time being because there job is still in tact. Of course if we merge or something, someone will need lose there job, but for right now, we should just cut the wages and make everyone happy because they have there job."
9	UnivBchair1	12:35:01 PM	if everyone accepts a 10% wage cut everyone can keep there jobs	Propos prof	Chair agrees with the ten percent cut and argues for it for everyone (based on the Chair's opening position, " Every employee of the company (including management and directors) should immediately accept a wage cut of 10%"
10	UnivBfin1	12:35:06 PM	yeah	Agree	DF supports his/her own proposal.
11	UnivBfin1	12:35:09 PM	employees		
12	UnivBur1	12:35:16 PM	ok good...but we need 60, 000 more	Rules	UR reminds the team about the

			dollars		amount needed to break even.
1 3	UnivBchair1	12:35:16 PM	and we save 240,000	Calc	Cutting everyone's salaries 10% will save more than \$200K.
1 4	UnivBur1	12:35:25 PM	ok ten we need 20,000 more	Calc	UR tracked the amount of money believed to be needed
1 5	UnivBfin1	12:35:29 PM	if we cut the managers from 30000 to 25000 no one loses out either	Propos prof	DF makes a suggestion from her opening position, "An immediate pay cut for all managers from \$30,000 to \$25,000"
1 6	UnivBfin1	12:35:47 PM	saving 45000	Calc	DF states calculated savings.
1 7	UnivBchair1	12:35:59 PM	we can cut 35000 from projects	Propos prof	Chair makes a suggestion from the opening position "\$35,000 will then be taken from the PROJECTS budget"
1 8	UnivBpers1	12:36:02 PM	We need to merge the finance and the developing departments	Propos prof	Director of Personnel (DP) makes a suggestion based on opening position "Merge Finance and Development"
1 9	UnivBur1	12:36:10 PM	we should fire ne manager	Propos prof	UR makes a suggestion from the opening position, "One manager from each department should be fired"
2 0	UnivBfin1	12:36:12 PM	we need to ADD to projects	Propos prof	DF makes another statement from the opening position, "you want to create a



					<i>surplus</i> , which can then be added to the PROJECTS budget"
2 1	UnivBur1	12:36:21 PM	that saves 90.000	Calc	UR states savings from firing managers.
2 2	UnivBfin1	12:36:24 PM	not take out from projects	Disagree	DF disagrees with Chair's suggestion to cut projects.
2 3	UnivBfin1	12:36:31 PM	yeah fire a manager	Agree	DF agrees with UR's suggestion to fire from management. This is in agreement with DF's opening position statement which says, " Cut two manager positions"
2 4	UnivBdev1	12:36:44 PM	no way	Disagree	DD disagrees with something.
2 5	UnivBdev1	12:36:54 PM	projects return 20%	Rules	And states a rule from the budget.
2 6	UnivBur1	12:36:58 PM	we need to fire a manager	Propos prof	UR repeats the suggestion from profile sheet.
2 7	UnivBpers1	12:37:00 PM	Doing this along with firing the director of finance will lead to saves of 287 000	Propos prof	Director of Personnel (DP) repeats a suggestion based on opening position " Merge Finance and Development"
2 8	UnivBchair1	12:37:03 PM	why don't all the employees cut there wages by 10%	Propos prof	Chair repeats the suggestion for everyone to take a 10% cut (based on the Chair's opening position, " Every employee of the company (including management and

					directors) should immediately accept a wage cut of 10%"
29	UnivBfin1	12:37:13 PM	yeah	Agree	DF again supports his/her own proposal stated by the Chair.
30	UnivBfin1	12:37:16 PM	thats what i said		
31	UnivBpers1	12:37:18 PM	lets cut wages along the board	Agree	DP voices agreement for ALL employee cuts, based on the Personnel Profile, "An immediate pay cut of 10% for ALL employees"
32	UnivBchair1	12:37:19 PM	it saves 240000	Calc	The Chair states the savings expected.
33	UnivBpers1	12:37:22 PM	10%		
34	UnivBchair1	12:37:30 PM	all agree on cutting wages?	Inqagree	The Chair checks for agreement
35	UnivBpers1	12:37:33 PM	Agreed	Agree	DP agrees
36	UnivBchair1	12:37:36 PM	agreed	Agree	The Chair agrees
37	UnivBfin1	12:37:41 PM	10% for employees and 5,000 from managers	Propos prof	DF suggests a statement from Finance's opening position
38	UnivBur1	12:37:41 PM	agreed	Agree	UR agrees, surprisingly, since this violates UR's minimum, level 1 goals.
39	UnivBfin1	12:37:43 PM	it saves more		
40	UnivBfin1	12:37:45 PM	agreed	Agree	DF agrees, apparently for the suggestion she modified.
4	UnivBur1	12:37:50 PM	and fire a manger	Propos	UR repeats the

1				prof	suggestion made earlier
4 2	UnivBfin1	12:38:01 PM	fire two managers	Propos prof	DF repeats her earlier suggestion
4 3	UnivBchair1	12:38:06 PM	don't fire anyone	Propos prof	Chair's opening position is against firing anyone, e.g., " All positions can then be kept"
4 4	UnivBurl1	12:38:10 PM	wh not	Inqrea son	UR inquires into Chair's reasoning
4 5	UnivBpers1	12:38:18 PM	If we really want to become efficient and at the same time save money we need to merge two departments together	Propos prof	DP argues for merging.
4 6	UnivBdev1	12:38:19 PM	weonly need 260.....if we cut employee's pays by 10% 200k, managers down 5k 45K...weonly need another 15k	Repeat	DD borrows Finance's text.
4 7	UnivBchair1	12:38:31 PM	true	Agree	The chair agrees
4 8	UnivBpers1	12:38:37 PM	We need to merge the developing and the finance departmnets together	Propos prof	DP restates the material from personnel's opening position.
4 9	UnivBchair1	12:38:45 PM	but if we should try to keep all the employees	Propos prof	Chair's profile states, "you realize that layoffs are unpopular, and you will not resort to this action unless absolutely necessary."
5 0	UnivBfin1	12:38:45 PM	finance cant be merged cuz u lose the 20% revenue	Rules	DF argues against merging by citing rules from the budget sheet.
5	UnivBpers1	12:38:56 PM	By doing htis we	Repeat	DP is still

1			increase not only efficiency, but we save money		proposing the merger from Finance's opening position. While money is mentioned in the profile, the increase in efficiency is not mentioned in the exercise.
5 2	UnivBdev1	12:38:58 PM	same w/ dev.	Agree	DP agrees that revenue would be lost if Finance and Development were merged.
5 3	UnivBchair1	12:39:16 PM	ok so should we merge departments?	Inqagree	The Chair checks for agreement.
5 4	UnivBpers1	12:39:24 PM	We do not need to increase revenue we need to save money	Disagree	DP disagrees with the need to increase revenue.
5 5	UnivBfin1	12:39:25 PM	yea well we can save money in so many other ways without losing 20%	Disagree	DF disagrees with DP.
5 6	UnivBpers1	12:39:33 PM	we need to save....	Disagree	DP repeats the disagreement.
5 7	UnivBpers1	12:39:38 PM	not earn revenue		
5 8	UnivBfin1	12:39:46 PM	cut two managers	Propos prof	DF makes a proposal from the opening position.
5 9	UnivBur1	12:39:48 PM	lets save money	Agree	UR agrees with DP
6 0	UnivBpers1	12:39:56 PM	Merge finance and Developing departments together	Propos prof	DP, meeting opposition, states the same material from the opening position
6 1	UnivBchair1	12:39:59 PM	ok so are we all in agreement to cut wages by 10% or not	Inqagree	Chair checks for agreement on the salary cut.
6	UnivBfin1	12:40:03 PM	yeah	Agree	DF agrees

2					
6 3	UnivBpers1	12:40:04 PM	yes	Agree	DP agrees
6 4	UnivBur1	12:40:08 PM	if we cut to managers that what 10,000	Agree	UR agrees conditionally (again, missing UR's level 1 requirement)
6 5	UnivBdev1	12:40:09 PM	yeah	Agree	DD agrees.
6 6	UnivBfin1	12:40:12 PM	but cut managers by 5,000 which is more	Propos prof	DF recites the proposal from her opening position
6 7	UnivBur1	12:40:14 PM	cut the fuckin wages	Directing	UR directs that the wages be cut.
6 8	UnivBpers1	12:40:20 PM	The next step is to increase efficiency	Directing	DP suggests the next step.
6 9	UnivBchair1	12:40:22 PM	ok wages are cut	Repeat	Chair announces the decision to cut wages
7 0	UnivBpers1	12:40:24 PM	and save money		
7 1	UnivBpers1	12:40:30 PM	The only way is to merge	Propos prof	DP again proposes the merger
7 2	UnivBfin1	12:40:32 PM	no	Disagree	DF disagrees
7 3	UnivBdev1	12:40:32 PM	200,000	Calc	DD announces the savings from cutting salaries.
7 4	UnivBur1	12:40:38 PM	whast wrong with merging?	Inqreason	UR inquires into the reasons for not merging.
7 5	UnivBchair1	12:40:40 PM	so if we merge who will be fired?	InqInfo	Chair questions who would be fired.
7 6	UnivBfin1	12:40:52 PM	if we merge we lose the 20% per manager	Rules	DF cites the rules as a reason for not merging
7 7	UnivBdev1	12:40:53 PM	we only need another 60k, we dont need to merge	Disagree	DD disagrees with merging. During the Reflection Period, he shared his thoughts on this response, "by

					merging it would only complicate things and lose jobs so i wanted to make sure we kept all the employees."
78	UnivBchair1	12:40:58 PM	the dev. or finance manager	Inqreason	Chair inquires into the reasoning about the merger.
79	UnivBdev1	12:41:05 PM	finance	Statelevel3	DD does not want to be fired since "retain your own position" is in all goal levels.
80	UnivBpers1	12:41:05 PM	The director of finance needs to go for the benefit of the whole company	Statelevel3	DP does not want to be fired since "retain your own position" is in all goal levels. In the reflection period, DP had this to say about this interaction, "i felt this was a good way of making everyone realize that this exercise is not a competition, but an attempt to find consensus and a agreed upon, economically sound way of saving our company" This implies that the DP thought that some people did think it was a competition.
81	UnivBchair1	12:41:11 PM	why's that	Inqreason	Chair inquires into why the Finance Director should be fired.
8	UnivBdev1	12:41:12 PM	agree	Agree	DD agrees with DP

2					to fire the DF
8 3	UnivBfin1	12:41:12 PM	quick question: is UnivBchair kurt??	Social	No names have been exchanged
8 4	UnivBur1	12:41:18 PM	no linn	Social	No names have been exchanged
8 5	UnivBpers1	12:41:21 PM	no	Social	No names have been exchanged
8 6	UnivBfin1	12:41:31 PM	alan?	Social	No names have been exchanged
8 7	UnivBpers1	12:41:36 PM	We need to save this company	Unity	"We" implies working together
8 8	UnivBur1	12:41:38 PM	yea lest get rid of the finace director	Repeat	UR repeats DP and DD's suggestion
8 9	UnivBdev1	12:41:40 PM	kendra i think	Social	No names have been exchanged
9 0	UnivBfin1	12:41:46 PM	kent blows a fat one	Insults	DF insults the UR
9 1	UnivBur1	12:41:53 PM	linn's a slut	Insults	UR responds by insulting the DF
9 2	UnivBur1	12:47:27 PM	slut	Insults	UR insults her again
9 3	UnivBfin1	12:48:48 PM	oh obviuosly		
9 4	UnivBur1	12:48:52 PM	ok		
9 5	UnivBchair1	12:48:57 PM	so		
9 6	UnivBur1	12:48:58 PM	whast the deal		
9 7	UnivBdev1	12:49:00 PM	any ways		
9 8	UnivBur1	12:49:01 PM	we needmoney		
9 9	UnivBchair1	12:49:05 PM	no really?		
1 0 0	UnivBpers1	12:49:08 PM	Ok. Lets get together for the benefit of the whole company	Unity	Another call for unity by the DP, possibly as a way of smoothing over the instance of name-calling.
1 0	UnivBchair1	12:49:18 PM	ok	Agree	Chair agrees

1					
1 0 2	UnivBfin1	12:49:26 PM	cut directors salaries by 10,000	Propos prof	DF makes a different suggestion from the profile, "An immediate cut in pay for directors from \$50,000 to \$40,000"
1 0 3	UnivBpers1	12:49:30 PM	Lets merge the finance and developing department	Propos prof	DP again suggests merger based on Personnel's opening position, "Merge Finance and Development"
1 0 4	UnivBdev1	12:49:32 PM	i say we cut out managers in personel	Propos prof	DD makes a proposal from his opening position, "Fire all 3 managers in Personnel"
1 0 5	UnivBdev1	12:49:36 PM	we have a director	Clarify	DD implies that a director is enough in the Personnel department. This also seems to be a move against DP's continued calls for merger, despite opposition from the other team members.
1 0 6	UnivBfin1	12:49:37 PM	yeah	Agree	DF agrees with firing DP
1 0 7	UnivBchair1	12:49:39 PM	ok yeah	Agree	Chair agrees with firing DP
1 0 8	UnivBfin1	12:49:40 PM	i agree	Agree	DF repeats agreement
1 0 9	UnivBpers1	12:49:45 PM	Along with the wage cut that will enable us to save 287 000	Calc	DP restates the calculation in his opening position,



					merger plus 10 % cuts will save 287K, ignoring calls for his firing.
1 1 0	UnivBchair1	12:49:50 PM	that's good		
1 1 1	UnivBur1	12:49:52 PM	ok good		
1 1 2	UnivBur1	12:50:02 PM	we need more...we want that 500.00	Strat	UR calls for saving more to win the prize.
1 1 3	UnivBchair1	12:50:04 PM	so how many managers should we cut	Inqrea son	Chair inquires for specifics about the number of managers to cut.
1 1 4	UnivBpers1	12:50:06 PM	it is more than needed and we will accomplish our mission	Clarify	DP, still arguing for a merger, suggests that the \$287K will be enough.
1 1 5	UnivBfin1	12:50:08 PM	cut out managers in personell	Propos level3	DF picks up on DD's proposal. DF's level 3 goal includes keeping all 3 managers in the Finance department. Her opening position suggests firing two managers. This would accomplish that goal.
1 1 6	UnivBpers1	12:50:09 PM	One	Propos level3	DP's has a level 3 goal to keep at least 7 managers, this would meet that goal.
1 1 7	UnivBchair1	12:50:15 PM	ok just one	Agree	Chair agrees
1 1	UnivBpers1	12:50:17 PM	The finance manager	Propos prof	DP's opening position says "the

8					Director of Finance position should be eliminated”
1 1 9	UnivBfin1	12:50:19 PM	cut two	Propos level3	DF states material from her opening position, to fire two managers.
1 2 0	UnivBpers1	12:50:26 PM	That will not be necessary	Disagr ee	DP disagrees with firing two of his managers.
1 2 1	UnivBur1	12:50:28 PM	yea ok linn	Agree	UR agrees with DF
1 2 2	UnivBfin1	12:50:41 PM	managers in personel..... not finance	Clarify	DF clarifies her proposal emphasizing that the managers not be taken from her department.
1 2 3	UnivBdev1	12:50:47 PM	cut 2 from personal.....1 from finance	Altern	DD suggests an alternative, which does not harm his department
1 2 4	UnivBpers1	12:50:48 PM	Bye doing that we save 50 000	Calc	DP advocates firing DF, saving the \$50K of her salary.
1 2 5	UnivBfin1	12:50:48 PM	they cost us the most	Statepr of	The Finance managers save \$20K per year, the Personnel managers save \$15K per year.
1 2 6	UnivBchair1	12:50:58 PM	ok personel	Agree	Chair agrees with firing managers from personnel.
1 2 7	UnivBdev1	12:51:00 PM	thats 90k	Calc	DD calculates the savings from firing three managers.
1 2 8	UnivBpers1	12:51:11 PM	The problem is that without that manager we have no authority to fire or hire anyone	Statepr of	DP seems to have interpreted the conversation as saying fire the Personnel Director, who is the only

					person able to hire or fire. DP also may be unaware that he is playing the role of the Personnel Director.
1 2 9	UnivBchair1	12:51:14 PM	we could lay off some of the employees	Altern	Chair offers an alternative way to save money.
1 3 0	UnivBchair1	12:51:17 PM	since there are 100	Statepr of	Chair cites numbers from the budget sheet.
1 3 1	UnivBchair1	12:51:24 PM	in personnel		
1 3 2	UnivBfin1	12:51:26 PM	yeah	Agree	DF agrees with firing from labor.
1 3 3	UnivBfin1	12:51:27 PM	do that	Directi ng	DF directs the group to fire from labor
1 3 4	UnivBchair1	12:51:40 PM	so how many should we lay off	Inqrea son	Chair inquires into the reasoning of others on how many workers are to be fired.
1 3 5	UnivBdev1	12:51:45 PM	no....keeping employees are needed to keep revenue	Statepr of	DD is against this because his profile states that "all 100 regular employees need to stay on the work force".
1 3 6	UnivBfin1	12:51:46 PM	30	Clarify	DF suggests the specific number she believes should be fired.
1 3 7	UnivBchair1	12:51:51 PM	hmm		
1 3 8	UnivBdev1	12:51:53 PM	managers do nothing tangible		
1	UnivBpers1	12:51:55 PM	We need to keep the	Statepr	The DP's profile

3 9			people	of	says that he "would like to retain all 100 regular employee jobs".
1 4 0	UnivBfin1	12:51:58 PM	no we dont	Disagree	DF disagrees with keeping the people.
1 4 1	UnivBdev1	12:51:58 PM	itsall about the \$	Strat	DD states his perspective on how to win.
1 4 2	UnivBpers1	12:52:11 PM	If we let go of the people we wont have any future whatso ever	Strat	DP states another strategy, perhaps partly based on some of University B's courses, which mention the negative effects of layoffs.
1 4 3	UnivBchair1	12:52:27 PM	we cut layoff one manager and cut the other 2's slaries to min. of 25000	Altern	Chair offers an alternative
1 4 4	UnivBfin1	12:52:31 PM	adding to projects is the only thing that is going to ADD revenue	Rules	DF cites the rules of the game.
1 4 5	UnivBfin1	12:52:31 PM	not just save it		
1 4 6	UnivBpers1	12:52:31 PM	We destroy ourselves	Strat	DP argues against firings as a strategy.
1 4 7	UnivBur1	12:52:42 PM	managrs save the company 15,000 each	Statepr of	UR states info about Personnel managers from the budget.
1 4 8	UnivBur1	12:52:42 PM	manages save 15,000 each tho		
1 4 9	UnivBdev1	12:52:53 PM	lets cut 2 mamagers in personel and 1 in finance....we gain 90k....what do	Altern	DD suggests an alternative which does not harm his department, the

			welose?		same as that he stated at 12:50:47.
150	UnivBfin1	12:53:00 PM	finance managers save 20,000 each	Statepr of	DF states info about Finance managers from the budget. This could be seen as self-protection.
151	UnivBpers1	12:53:09 PM	By merging these two departments we get all teh benefits at once without hurting the company in the long run	Propos prof	DP again makes the proposal from his opening position to merge Finance and Personnel.
152	UnivBfin1	12:53:21 PM	which is why we should lay off one of the three personel managers	Statele vel3	DF makes a statement based on one of her level 3 goals, to keep all 3 managers in Finance. During the Reflection Period, DF had this to say about her response, "all he keeps saying is merge merge, that is how i feel. he keeps saying that and i dont agree, and i dont retain level one position if we merge."
153	UnivBdev1	12:53:41 PM	can we agree to do that	Inqagr ee	DD checks for agreement.
154	UnivBpers1	12:53:47 PM	Linn dont get personal. This is about the future of the company	Unity	DP cites the future of the company, as in "everyone's best interest".
155	UnivBdev1	12:53:48 PM	1 personel manager?	Clarify	DD seeks to clarify DF's statement.
155	UnivBfin1	12:53:55 PM	merging finance will lose us 140,000 thats	Statepr of	DF cites the info that total

6			what it says on my sheet		expenditures for the Finance department are \$140K.
1 5 7	UnivBfin1	12:54:04 PM	im not getting personal, its what it says	Unity	DF takes the position of "not getting personal" and refers to the authority of the written document.
1 5 8	UnivBfin1	12:54:09 PM	do what you want		
1 5 9	UnivBchair1	12:54:11 PM	then lets not merge	Directing	Chair directs the team to a decision.
1 6 0	UnivBchair1	12:54:18 PM	if we lose that much it might not be worth it	Clarify	And clarifies his reasoning.
1 6 1	UnivBfin1	12:54:24 PM	probably not	Agree	DF appears to agree.
1 6 2	UnivBdev1	12:54:26 PM	can we cut 1 personel manager>?	Inqability	DD asks whether it is possible to cut a manager from personnel.
1 6 3	UnivBpers1	12:54:29 PM	Merging wont make us lose anything it wil cut cost	Clarify	DP clarifies his reasoning behind a merger.
1 6 4	UnivBpers1	12:54:32 PM	cut cost		
1 6 5	UnivBpers1	12:54:34 PM	cut cost		
1 6 6	UnivBfin1	12:54:43 PM	and cut 140,000	Disagree	DF disagrees.
1 6 7	UnivBfin1	12:54:45 PM	super		
1 6 8	UnivBpers1	12:54:50 PM	It will increase efficiency as well	Disagree	DP disagrees.

1 6 9	UnivBfin1	12:54:56 PM	140,000 of profit	Disagree	DF still disagrees
1 7 0	UnivBfin1	12:55:00 PM	ok do that then kurt	Agree	DP suddenly agrees.
1 7 1	UnivBpers1	12:55:01 PM	we have one department working together	Unity	DP makes a nod to unity.
1 7 2	UnivBpers1	12:55:05 PM	as one		
1 7 3	UnivBfin1	12:55:05 PM	we will merge	Agree	DF agrees.
1 7 4	UnivBpers1	12:55:09 PM	at a lower price		
1 7 5	UnivBfin1	12:55:11 PM	yay		
1 7 6	UnivBchair1	12:55:17 PM	o		
1 7 7	UnivBdev1	12:55:18 PM	what?	Clarify	DD seeks clarification
1 7 8	UnivBchair1	12:55:18 PM	k		
1 7 9	UnivBchair1	12:55:30 PM	so all in consensus to merge?	Inqagree	Chair checks for agreement.
1 8 0	UnivBpers1	12:55:32 PM	And keeping the people	Statepr of	DP repeats his desire to keep from firing workers.
1 8 1	UnivBchair1	12:55:33 PM	or not		
1 8 2	UnivBchair1	12:55:35 PM	yeha		
1	UnivBpers1	12:55:37 PM	yes		

8 3					
1 8 4	UnivBfin1	12:55:42 PM	well my thing on my goal sheet was to keep my department and i dont reach level one if we merge	Linklevel1	DF links the goal "retain your own position" to level 1.
1 8 5	UnivBfin1	12:55:48 PM	but whatever		
1 8 6	UnivBchair1	12:55:51 PM	yeah but we have to layoff someone if we merge	Clarify	Chair clarifies the impact of the decision to merge.
1 8 7	UnivBpers1	12:55:55 PM	Linn you are the best	Social	DP appreciates DF's sacrifice.
1 8 8	UnivBfin1	12:55:57 PM	for the good of the company... lets merge	Unity	DF cites unity as underlying the decision
1 8 9	UnivBdev1	12:55:59 PM	we all have to reach level one	Rules	DD cites the rule that all must reach level 1.
1 9 0	UnivBpers1	12:56:06 PM	But this company need sto survive	Strat	DP relates the strategy of merging as a survival mechanism.
1 9 1	UnivBpers1	12:56:22 PM	IT will.		
1 9 2	UnivBfin1	12:56:25 PM	yeah so losing our 140,000 profit by merging... not gonna help us survive	Disagree	DF disagrees with the survival mechanism.
1 9 3	UnivBfin1	12:56:27 PM	but whatever		
1 9 4	UnivBfin1	12:56:32 PM	lets do it	Directing	DF directs the team to the decision to merge.
1 9 5	UnivBchair1	12:56:39 PM	are u sure	Inquire	Chair checks for agreement



1 9 6	UnivBur1	12:56:44 PM	lenn if you keep it up your not gonna survive	Min	UR chastens DF for the decision.
1 9 7	UnivBfin1	12:56:50 PM	i said lets do it	Directi ng	DF directs the team to the decision to merge.
1 9 8	UnivBfin1	12:56:52 PM	i dont care		
1 9 9	UnivBchair1	12:56:56 PM	but then she won't reach level 1	Rules	Chair cites the rule that all must reach level 1. During the Reflection Period, Chair cites her reasoning behind this response by saying, "in order to make the company succeed we all need to reach level one and if merging a company does not allow one person to do this, then i'm sure that we can think up another solution."
2 0 0	UnivBdev1	12:56:58 PM	listen.....if we all go for level 1.....we can save al ot of money	Strat	DD suggests a strategy of all being at level 1 to win.
2 0 1	UnivBpers1	12:56:59 PM	Profit is in the future, svaing money is what needs to be done roight now	Strat	DP responds to the 12:56:25 comment about survival by suggesting a strategy to survive.
2 0 2	UnivBchair1	12:57:04 PM	and we all need to reach that level	Rules	Chair repeats the rule about reaching level 1.
2 0 3	UnivBfin1	12:57:10 PM	i cant reach level 1 if we merge	Linkle vell	DF again links the goal to her level 1.
2	UnivBfin1	12:57:16 PM	sorry		

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205	UnivBpers1	1:05:36 PM	Ok, thsi is what we should do. Look at your individual level two.	Directing	After the reflection period, DP directs the team into action.
206	UnivBpers1	1:05:36 PM	We all need to compromise and come to a good conclusion.	Unity	DP calls for unity by working together. During the Reflection Period, DP had this to say about his response, "This was my attempt to make sure evyrone could feel they gained something rather than someone losing it all. We needed to come together"
207	UnivBpers1	1:05:36 PM	I am willing to fire five people out of my department along with one manager form every department.	Propos level2	DP makes a proposal based at least partly on his level 2 goals of "retain at least 95 regular employee jobs, retain at least 5 managers total"
208	UnivBdev1	1:05:57 PM	i agree wiht kurt	Agree	DD agrees
209	UnivBpers1	1:06:04 PM	That would create savings of 130k	Calc	DP calculates savings from his proposal.
210	UnivBfin1	1:06:05 PM	ok	Agree	DF agrees. During the Reflection Period, she shared her thoughts about DP's call for unity, "i was kinda glad he did this because now now everyone

					is getting past level 1 but not trying to screw other people over to get to level 3".
2 1 1	UnivBfin1	1:06:14 PM	i guess i agree		
2 1 2	UnivBchair1	1:06:16 PM	my level 2 is just to have a budget surplus of at least 5000	Linklevel2	Chair states a goal and links it to the level 2.
2 1 3	UnivBdev1	1:06:20 PM	i agree to that	Agree	DD agrees.
2 1 4	UnivBchair1	1:06:22 PM	so that works for me		
2 1 5	UnivBpers1	1:06:26 PM	look at your level two and come back to me	Directing	DP directs the team to look at their goals.
2 1 6	UnivBchair1	1:06:28 PM	what about u linn	Inqagree	Chair checks for agreement.
2 1 7	UnivBdev1	1:06:36 PM	i can do that		
2 1 8	UnivBfin1	1:06:46 PM	sure whatever	Comply	DF complies
2 1 9	UnivBfin1	1:06:49 PM	i dont care		
2 2 0	UnivBfin1	1:06:50 PM	its fine		
2 2 1	UnivBur1	1:06:50 PM	i will fire 5 people...but i have below above a 7% pay cut	StateLevel1	UR states info from his level 1 goal, keeping "95 jobs with less than a 7% cut in wages"
2 2	UnivBpers1	1:06:54 PM	If we all can do this we would reach	Strat	DP cites the strategy for

2			conclusion and save money		winning.
2 2 3	UnivBfin1	1:07:06 PM	ok	Agree	DF agrees
2 2 4	UnivBur1	1:07:22 PM	yea but i cant do a %10 pay cut if we d0	Clarify	UR clarifies his previous statement.
2 2 5	UnivBpers1	1:07:24 PM	You dont have to fire five people	Altern	DP offers an alternative.
2 2 6	UnivBdev1	1:07:40 PM	?		
2 2 7	UnivBchair1	1:07:49 PM	wait, can people only have a certain % of wage cut?	Inqabil ity	Chair asks what is possible for people to do.
2 2 8	UnivBur1	1:07:49 PM	even if i dont i cant go above Z%9 pay cut	StateL evel1	UR states info from his level 1 goal, keeping "100 jobs with less than a 9% cut in wages"
2 2 9	UnivBfin1	1:07:54 PM	why doesnt he fire 5 people instead of taking the 10% budget cut?	Clarify	DF seeks to clarify the reasoning behind UR's statements.
2 3 0	UnivBfin1	1:07:59 PM	it makes the same difference		
2 3 1	UnivBpers1	1:07:59 PM	Only out of my department of 100 I can fire five and save 100	StateL evel2	DP states info from his level 2 goals.
2 3 2	UnivBpers1	1:08:10 PM	k		
2 3 3	UnivBchair1	1:08:25 PM	why don't we reduce the director's and managers salaries down to the min.	Strat	Chair suggests a strategy for winning
2 3 4	UnivBur1	1:08:26 PM	what do you want me to do with my employees	Clarify	UR seeks to clarify others suggestions for what to do.

2 3 5	UnivBpers1	1:08:34 PM	Can we agree on the salary cut	Inqagree	DP checks for agreement.
2 3 6	UnivBur1	1:08:42 PM	of how much?	Clarify	UR seeks to clarify the amount to be saved.
2 3 7	UnivBpers1	1:08:47 PM	What would the total savings be?	InqInfo	DP asks about savings.
2 3 8	UnivBdev1	1:08:55 PM	25k for managers.....	Calc	DD calculates savings.
2 3 9	UnivBpers1	1:08:56 PM	Nine percent	Clarify	DD clarifies the amount saved.
2 4 0	UnivBdev1	1:09:03 PM	thats the min		
2 4 1	UnivBfin1	1:09:04 PM	ok		
2 4 2	UnivBpers1	1:09:06 PM	across the board		
2 4 3	UnivBfin1	1:09:06 PM	agreed	Agree	DF agrees
2 4 4	UnivBdev1	1:09:09 PM	that saves 45k	Calc	Savings calculated
2 4 5	UnivBchair1	1:09:11 PM	ok	Agree	Chair agrees
2 4 6	UnivBpers1	1:09:12 PM	ok	Agree	DP agrees
2 4 7	UnivBdev1	1:09:15 PM	k	Agree	DD agrees
2 4 8	UnivBpers1	1:09:18 PM	Now look at your managers	Directing	DP directs the team to the next step.
2	UnivBdev1	1:09:19 PM	so we got 245	Calc	DD calculates

4 9					savings
2 5 0	UnivBpers1	1:09:29 PM	How many can you fire	Inqability	DP inquires about abilities.
2 5 1	UnivBur1	1:09:30 PM	where is the 200,000 comin from	Inqreason	UR wonders about the 200K, since this had come from the workers 10% cut that he couldn't do.
2 5 2	UnivBchair1	1:09:39 PM	we already have 242000	Calc	Chair calculates savings.
2 5 3	UnivBdev1	1:09:41 PM	the original 200k	Clarify	DD clarifies the savings
2 5 4	UnivBchair1	1:09:44 PM	from wage cuts		
2 5 5	UnivBpers1	1:09:45 PM	from where	Inqreason	DP also wonders where the savings came from.
2 5 6	UnivBdev1	1:10:01 PM	lets drop 1 manager from ech dep.	Propos level2	DD makes a proposal congruent with his level 2 goal of keeping two managers in his department.
2 5 7	UnivBpers1	1:10:01 PM	On top of the ten %	Clarify	DP clarifies the source of savings.
2 5 8	UnivBpers1	1:10:04 PM	ok		
2 5 9	UnivBdev1	1:10:04 PM	each		
2 6 0	UnivBchair1	1:10:10 PM	the 10% across the board that we all agreed on in the beginning	Repeat	Chair repeats the previous decision to cut wages 10%.
2 6 6	UnivBur1	1:10:15 PM	i cant do that	Disagree	UR repeats his statement.

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2 6 2	UnivBfin1	1:10:22 PM	9%	Altern	DF suggests an alternative. During the Reflection Period, she shared her thoughts on this suggestion, "i said that 9% thing in anticipatin because i knew he couldnt cut more than that"
2 6 3	UnivBpers1	1:10:24 PM	NoNonono	Disagree	DP disagrees
2 6 4	UnivBdev1	1:10:25 PM	now you tell us		
2 6 5	UnivBpers1	1:10:29 PM	%		
2 6 6	UnivBur1	1:10:29 PM	thats what im say8ing cant cut %10	Clarify	UR clarifies
2 6 7	UnivBdev1	1:10:31 PM	way to go kent		
2 6 8	UnivBpers1	1:10:33 PM	9%	Altern	DP suggests an alternative again
2 6 9	UnivBpers1	1:10:38 PM	agreed		
2 7 0	UnivBpers1	1:10:39 PM	9%	Altern	DP suggests an alternative again
2 7 1	UnivBdev1	1:10:41 PM	k	Agree	DD agrees
2 7 2	UnivBfin1	1:10:43 PM	agreed	Agree	DF agrees
2 7 7	UnivBchair1	1:10:50 PM	fine with me	Agree	Chair agrees

3					
2 7 4	UnivBur1	1:10:52 PM	ok	Agree	UR agrees
2 7 5	UnivBpers1	1:10:56 PM	Then fire one manager from every department	Repeat	DP repeats DD's previous suggestion
2 7 6	UnivBdev1	1:11:03 PM	lets drop 1 manager from each dep.	Repeat	DD repeats his suggestion
2 7 7	UnivBpers1	1:11:04 PM	savings = 90 000	Calc	Savings calculated
2 7 8	UnivBdev1	1:11:13 PM	good call		
2 7 9	UnivBfin1	1:11:15 PM	k		
2 8 0	UnivBchair1	1:11:16 PM	so with the 9% we save 45K?	Calc	Savings calculated
2 8 1	UnivBfin1	1:11:17 PM	agreed	Agree	DF agrees
2 8 2	UnivBchair1	1:11:19 PM	is that right	Inqagree	Chair checks for agreement
2 8 3	UnivBpers1	1:11:19 PM	Chair, whats the total?	InqInfo	DP checks for info
2 8 4	UnivBchair1	1:11:24 PM	hold up		
2 8 5	UnivBpers1	1:11:27 PM	of savings so far		
2 8 6	UnivBchair1	1:11:46 PM	287,000	Calc	Calculations of the savings so far.
2 8 7	UnivBur1	1:11:50 PM	lets make pay cuts for managers to	Strat	UR suggests a strategy for saving.



2 8 8	UnivBchair1	1:11:54 PM	that's with the 45k	Clarify	Chair clarifies the savings.
2 8 9	UnivBchair1	1:12:01 PM	right? we did save 45k? or not	InqInfo	Chair inquires about the savings.
2 9 0	UnivBdev1	1:12:08 PM	no its only 30k	Calc	DD calculated differently
2 9 1	UnivBpers1	1:12:10 PM	where do they come from?	Inqreason	DP seeks the reasoning behind the savings.
2 9 2	UnivBchair1	1:12:17 PM	30k from where		
2 9 3	UnivBur1	1:12:18 PM	take a %10 pay cut on managers	Directing	UR directs the team (his profile says management must take a bigger cut than the workers).
2 9 4	UnivBfin1	1:12:19 PM	cut managers by 5,000	Propos prof	DF makes a proposal based on her opening position.
2 9 5	UnivBpers1	1:12:25 PM	ok	Agree	DP agrees.
2 9 6	UnivBdev1	1:12:33 PM	yeah but we only have 6 managers not 9	Repeat	DD repeats the decision made earlier to cut three managers.
2 9 7	UnivBdev1	1:12:37 PM	we fired 3 of them		
2 9 8	UnivBfin1	1:12:39 PM	so		
2 9 9	UnivBfin1	1:12:47 PM	still cut the rest by 5,000	Directing	DF directs the team to cut the manager's salaries.
3 0 0	UnivBdev1	1:12:48 PM	30k not 45k	Calc	DD calculated savings.

3 0 1	UnivBchair1	1:12:52 PM	ok got it	Agree	Chair agrees.
3 0 2	UnivBdev1	1:12:54 PM	yeah		
3 0 3	UnivBur1	1:13:01 PM	ok well eith take %10 from amangers or 5,000	Altern	UR suggests the alternative.
3 0 4	UnivBpers1	1:13:01 PM	Hold up. I need to save seven managers	Statele vel3	DP based this need on level 3 goals.
3 0 5	UnivBchair1	1:13:03 PM	so far we save 272000	Calc	Chair calculated savings.
3 0 6	UnivBchair1	1:13:14 PM	with the wage cut and 30k		
3 0 7	UnivBur1	1:13:22 PM	so only cut two managers then	Agree	UR agrees to only cut 2 managers.
3 0 8	UnivBpers1	1:13:29 PM	that means two have to go and then we need to cut wages	Clarify	DP clarifies the implications
3 0 9	UnivBdev1	1:13:32 PM	1 from finance 1 from personel	Propos level3	DD makes a proposal which will allow him to meet level 3, i.e., keep 3 managers in Development.
3 1 0	UnivBfin1	1:13:35 PM	the ones in finance give the company the most money though	Rules	DF talks about the money saved by managers.
3 1 1	UnivBchair1	1:13:37 PM	we already cut wages	Repeat	Repeating the decision made.
3 1 2	UnivBchair1	1:13:55 PM	as of now we are 2000 over the amout we need to save	Calc	Chair calculates savings.
3 1 3	UnivBdev1	1:13:59 PM	wages from the remaining managers		

3 1 4	UnivBpers1	1:14:14 PM	Ok spell it out where the savings comes from	Directing	DP directs that the savings be made clear.
3 1 5	UnivBfin1	1:14:17 PM	finaance managers give the company 20,000 each as opposed to 15,000	Statepr of	Info from the budget is stated.
3 1 6	UnivBchair1	1:14:19 PM	so why don't we give them the min. salaries	Inqrea son	Chair asks why
3 1 7	UnivBfin1	1:14:23 PM	yeah	Agree	DF agrees
3 1 8	UnivBfin1	1:14:32 PM	do that	Agree	
3 1 9	UnivBdev1	1:14:34 PM	there goes our savings		In the Reflection Period, DD stated his reasoning behind this response, "this is where everything is falling apart we cant compromise things conflict and such. the #'s dont work out"
3 2 0	UnivBpers1	1:14:39 PM	Spell put where the savings comes from so we can compare	Directing	DP directs again that the savings be made clear.
3 2 1	UnivBchair1	1:14:46 PM	who me?		
3 2 2	UnivBpers1	1:14:49 PM	yes		
3 2 3	UnivBfin1	1:14:49 PM	yar		
3 2 4	UnivBdev1	1:14:52 PM	god		
3	UnivBpers1	1:14:56 PM	your the boss		

2 5					
3 2 6	UnivBdev1	1:21:59 PM	ok.....why dont we all compromise our goals.....just leave one person a level 3, and everyone else gets nothing.....then IF we win we split the money evenly.....we would save millions.....?	Strat	DD suggests a strategy for saving money.
3 2 7	UnivBchair1	1:22:05 PM	wage cuts 242000 9%-30000	Calc	Chair delivers the calculations
3 2 8	UnivBchair1	1:22:10 PM	total 272000	Calc	
3 2 9	UnivBpers1	1:22:22 PM	Thank you chair		
3 3 0	UnivBfin1	1:22:25 PM	thanks		
3 3 1	UnivBchair1	1:22:25 PM	does that seem right to everyone	Inqagree	Chair checks for agreement.
3 3 2	UnivBchair1	1:22:27 PM	so far?		
3 3 3	UnivBfin1	1:22:47 PM	yeah		
3 3 4	UnivBpers1	1:22:49 PM	I believe it is better to make everyone sort of happy than to make someone really happy	Unity	DP suggests working together
3 3 5	UnivBur1	1:22:49 PM	yup good	Agree	UR agrees
3 3	UnivBchair1	1:22:50 PM	sweet	Agree	Chair agrees

6					
3 3 7	UnivBchair1	1:22:52 PM	uh huh	Agree	
3 3 8	UnivBfin1	1:22:54 PM	yeah	Agree	DF agrees
3 3 9	UnivBpers1	1:22:57 PM	ok	Agree	DP agrees with himself
3 4 0	UnivBur1	1:23:14 PM	lets get rid of the whole finance dep.	Repeat	UR repeats a suggestion DP gave earlier from his profile
3 4 1	UnivBchair1	1:23:15 PM	why don't we cut 35000 from projects	Propos prof	Chair makes a proposal from her opening position
3 4 2	UnivBchair1	1:23:22 PM	that will save us 28000 in the end	Calc	And states the resultant savings.
3 4 3	UnivBpers1	1:23:25 PM	Concensus my friends, consencus	Unity	DP reminds everyone to work together.
3 4 4	UnivBchair1	1:23:40 PM	so should we cut from the projects	Inqagree	Chair checks for agreement
3 4 5	UnivBdev1	1:23:41 PM	but the company who saves the most gets the \$.....we should just compomiseour goals and go for the savings	Unity	DD suggests working together to win.
3 4 6	UnivBur1	1:23:44 PM	yea listen to the swede	Agree	UR agrees
3 4 7	UnivBchair1	1:23:52 PM	so lets cut from the projects	Propos prof	Chair repeats her suggestion from the opening position
3 4 8	UnivBchair1	1:24:01 PM	agree or disagree?	Inqagree	Chair checks for agreement
3	UnivBdev1	1:24:04 PM	thats easy for you to		

4 9			say		
3 5 0	UnivBfin1	1:24:18 PM	its not who saves the most... its who makes the most profit	Rules	DF states the rules of the game.
3 5 1	UnivBfin1	1:24:24 PM	we have to start by saving	Strat	DF suggests a strategy
3 5 2	UnivBur1	1:24:27 PM	lets get the omney and split it	Unity	UR suggests sharing the reward
3 5 3	UnivBur1	1:24:33 PM	ok quick we dont have enough time		
3 5 4	UnivBur1	1:24:36 PM	lets get to the point	Directi ng	UR directs people to start quickly
3 5 5	UnivBchair1	1:24:41 PM	yeah		
3 5 6	UnivBpers1	1:24:42 PM	Its the one who show the best team work	Unity	DP advocates teamwork
3 5 7	UnivBdev1	1:24:42 PM	good call		
3 5 8	UnivBfin1	1:24:48 PM	so cutting from projects will decrease our profit	Rules	DF cites the rules
3 5 9	UnivBchair1	1:24:49 PM	of course	Agree	Chair agrees
3 6 0	UnivBfin1	1:24:56 PM	ok then lets dowhatever		
3 6 1	UnivBdev1	1:24:59 PM	no its not....its the one who saves the most \$	Rules	DD repeats the rules
3 6 2	UnivBchair1	1:25:03 PM	well we lose 7000	Calc	Chair repeats calculations
3	UnivBpers1	1:25:06 PM	Chair. It is your	Unity	DP states that the

6 3			call/We all stand bye you		team is united.
3 6 4	UnivBfin1	1:25:10 PM	kurt what do you want us to do		
3 6 5	UnivBur1	1:25:17 PM	shut up linn	Min	UR cuts off DF
3 6 6	UnivBfin1	1:25:20 PM	im serious		
3 6 7	UnivBfin1	1:25:23 PM	he knows whats up		
3 6 8	UnivBdev1	1:25:30 PM	no the chair person		
3 6 9	UnivBchair1	1:25:31 PM	ok well what would help most people		
3 7 0	UnivBpers1	1:25:37 PM	Lets get everyone on level two and save the required money	Strat	DP suggests a strategy for winning
3 7 1	UnivBfin1	1:25:42 PM	no shit		
3 7 2	UnivBchair1	1:25:50 PM	so i still need to save 3000		
3 7 3	UnivBchair1	1:25:53 PM	to be at level 2	Linkle vel2	Chair links level 2 goals (budget surplus of at least \$5,000)
3 7 4	UnivBpers1	1:25:58 PM	That was what we had almost agreed on		
3 7 5	UnivBfin1	1:26:00 PM	yeah		
3 7 6	UnivBchair1	1:26:03 PM	what does everyone else need to do	Inqlev el	Chair inquires into the goals of others
3	UnivBur1	1:26:03 PM	i need to stay at level	Linkle	UR repeats part of

7 7			1 in order for there to be at 9% cuts	vel1	the requirements for level 1.
3 7 8	UnivBur1	1:26:16 PM	if i got to level 2 i need to be less than 7% cuts	Linklevel2	UR links level 2 goals.
3 7 9	UnivBchair1	1:26:18 PM	ok well then u stay at level one and everyone else get to 2	Directing	Chair directs the team's actions.
3 8 0	UnivBpers1	1:26:24 PM	sounds good	Agree	DP agrees
3 8 1	UnivBchair1	1:26:26 PM	ok	Agree	Chair agrees
3 8 2	UnivBdev1	1:26:28 PM	great	Agree	DD agrees
3 8 3	UnivBchair1	1:26:32 PM	so i need to still save 3000	Calc	Chair repeats calculations
3 8 4	UnivBdev1	1:26:36 PM	so whats our plan	Inqreason	DD seeks other's reasoning.
3 8 5	UnivBchair1	1:26:39 PM	any suggestions	Inqreason	Chair does as well.
3 8 6	UnivBdev1	1:26:43 PM	the final plan?...chairperson?	Inqreason	DD asks the Chair.
3 8 7	UnivBpers1	1:26:44 PM	If thats what it takes		
3 8 8	UnivBdev1	1:26:47 PM	also known as kendra	Social	
3 8 9	UnivBfin1	1:26:50 PM	haha	Social	
3 9 0	UnivBchair1	1:26:52 PM	can we fire anyone?	Inqability	Chair asks about firing
3	UnivBur1	1:26:57 PM	yea linn	Min	UR suggests firing



9 1					Linn
3 9 2	UnivBpers1	1:26:57 PM	yeah, linn	Min	DP agrees
3 9 3	UnivBchair1	1:26:59 PM	that would save us 3000+	Calc	Chair calculates savings
3 9 4	UnivBdev1	1:27:00 PM	k		
3 9 5	UnivBur1	1:27:01 PM	hahahaha		
3 9 6	UnivBchair1	1:27:04 PM	yeah whatever		
3 9 7	UnivBchair1	1:27:11 PM	seriously		
3 9 8	UnivBfin1	1:27:12 PM	i love kurt	Social	Linn states her love for DP
3 9 9	UnivBfin1	1:27:16 PM	forever and ever	Social	
4 0 0	UnivBdev1	1:27:19 PM	fire linn.....sounds good	Min	DD also wants to fire DF
4 0 1	UnivBchair1	1:27:20 PM	uh huh		
4 0 2	UnivBur1	1:27:24 PM	haha do it	Min	
4 0 3	UnivBchair1	1:27:29 PM	no, lets fire a reg. employee	Altern	Chair suggests firing someone other than DF
4 0 4	UnivBur1	1:27:34 PM	we cant	Disagr ee	UR disagrees
4 0	UnivBpers1	1:27:34 PM	Seriously lets do it		

5					
4 0 6	UnivBchair1	1:27:42 PM	not linn but a reg		
4 0 7	UnivBpers1	1:27:43 PM	fire fire fire		
4 0 8	UnivBfin1	1:27:47 PM	you guys are awesome		
4 0 9	UnivBpers1	1:27:54 PM	She needs to go	Min	DP repeats the call to fire DF
4 1 0	UnivBur1	1:27:55 PM	yea well you suck	Insults	UR adds an insult
4 1 1	UnivBchair1	1:27:59 PM	so how many reg should we fire	InqInfo	Chair attempts to get the conversation back
4 1 2	UnivBchair1	1:28:05 PM	hello		
4 1 3	UnivBur1	1:28:08 PM	linn jsut bight the bullet	Min	
4 1 4	UnivBdev1	1:28:09 PM	all fthem		
4 1 5	UnivBchair1	1:28:11 PM	clock is tickin		
4 1 6	UnivBur1	1:28:13 PM	and pack your bags		
4 1 7	UnivBpers1	1:28:13 PM	Ok		
4 1 8	UnivBfin1	1:28:15 PM	ok lets fire some regular employees	Directing	
4 1 9	UnivBfin1	1:28:18 PM	lets get serious.	Directing	

4 2 0	UnivBchair1	1:28:19 PM	how many	Inqinf o	Chair still hasn't received an answer about how many to fire
4 2 1	UnivBchair1	1:28:21 PM	10		
4 2 2	UnivBpers1	1:28:25 PM	chair it is up to you		
4 2 3	UnivBchair1	1:28:39 PM	who's in charge of that dep?		
4 2 4	UnivBfin1	1:28:40 PM	how many is the minimum to save what we need		
4 2 5	UnivBdev1	1:28:42 PM	chair.....its your call		
4 2 6	UnivBur1	1:28:42 PM	no we cant we ll gon on strike		
4 2 7	UnivBur1	1:28:47 PM	we can fire 5 of them	Propos level1	UR makes a proposal from his level 1 goals.
4 2 8	UnivBfin1	1:28:50 PM	ok	Agree	DF agrees
4 2 9	UnivBfin1	1:28:53 PM	lets do 5		
4 3 0	UnivBchair1	1:28:54 PM	well if we fire 1 we save 20000		
4 3 1	UnivBur1	1:28:57 PM	thats it but then it has to be a 6.9 % cut	Statele vell	UR states the requirement from his Level 1 goals.
4 3 2	UnivBpers1	1:29:05 PM	ok	Agree	DP agrees
4 3 3	UnivBdev1	1:29:10 PM	fire 5, and cut the rest 10%	Repeat	DD repeats the decision

4 3 4	UnivBchair1	1:29:10 PM	and we only need to save 3000 more	Calc	Chair calculates savings.
4 3 5	UnivBchair1	1:29:15 PM	so lets just fire 1	Altern	Chair suggests an alternative, firing only 1
4 3 6	UnivBpers1	1:29:17 PM	ok	Agree	DP agrees
4 3 7	UnivBchair1	1:29:23 PM	all in agreement	Inqagree	Chair checks for agreement
4 3 8	UnivBpers1	1:29:27 PM	I		
4 3 9	UnivBur1	1:29:29 PM	we cant its either keep all of them or go to fire 5 of them	Statelevel1	UR states the requirement from his level 1 goals
4 4 0	UnivBpers1	1:29:38 PM	who the fuck is UnivBur	Social	DP asks for UR's identity
4 4 1	UnivBchair1	1:29:38 PM	then lets fire 5	Repeat	Chair repeats the fire 5 idea
4 4 2	UnivBdev1	1:29:39 PM	i am resigning....theres another 50k	Altern	DD makes a mock suggestion
4 4 3	UnivBfin1	1:29:45 PM	hahahhaa		
4 4 4	UnivBchair1	1:29:46 PM	for real		
4 4 5	UnivBfin1	1:29:51 PM	lets fire 5.	Repeat	DF repeats the suggestion
4 4 6	UnivBpers1	1:29:57 PM	lets	Agree	DP agrees
4 4 7	UnivBdev1	1:30:02 PM	fuck		
4	UnivBchair1	1:30:12 PM	wait is UnivBdev	Clarify	Chair seeks to

4 8			resigning?		clarify the situation
4 4 9	UnivBfin1	1:30:13 PM	alan rules		
4 5 0	UnivBpers1	1:30:14 PM	We all know whos fault it is		
4 5 1	UnivBur1	1:30:14 PM	if we fire 5 the pay cut cna only be 6.9%	Statele vel1	UR states the requirement from level 1
4 5 2	UnivBdev1	1:30:21 PM	my whole department	Altern	DD repeats and expands on his mock suggestion
4 5 3	UnivBdev1	1:30:28 PM	meand my 3 managers		
4 5 4	UnivBchair1	1:30:35 PM	hmhhh		
4 5 5	UnivBchair1	1:30:38 PM	so are u gonna do that		
4 5 6	UnivBfin1	1:30:47 PM	look keep the company in mind...	Unity	DF calls for unity.
4 5 7	UnivBdev1	1:30:48 PM	yeah...other wise, we have no chance		
4 5 8	UnivBchair1	1:30:57 PM	we already have the amount we need to save		
4 5 9	UnivBpers1	1:31:00 PM	ok		
4 6 0	UnivBdev1	1:31:01 PM	thats 140kl		
4 6 1	UnivBfin1	1:31:03 PM	we need you on level one tho or the company is penalized	Strat	DF cites the strategy of going to level 1
4	UnivBchair1	1:31:12 PM	is everyone on	Inqlev	Chair asks about

6 2			level1	e	goal levels.
4 6 3	UnivBur1	1:31:33 PM	fire linn she sucks	Insults	UR insults DF
4 6 4	UnivBur1	1:31:36 PM	linn sucks	Insults	
4 6 5	UnivBur1	1:31:40 PM	screw you linn	Insults	
4 6 6	UnivBur1	1:31:44 PM	just quit now	Min	UR minimizes her involvement
4 6 7	UnivBur1	1:33:47 PM	linn goplay in traffic	Min	
4 6 8	UnivBfin1	1:34:28 PM	fine i quite		
4 6 9	UnivBchair1	1:34:31 PM	don't	Disagreee	Chair disagrees
4 7 0	UnivBfin1	1:34:50 PM	i resign along with my entire dept		
4 7 1	UnivBchair1	1:34:55 PM	NOOOO	Disagreee	Chair disagrees
4 7 2	UnivBfin1	1:34:58 PM	thats saves a lot of money		

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