

*"Nothing is so well learned as that which is discovered." - Socrates*

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Article by Chris Musselwhite, Ed.D.



Working with simulations over the past twenty years has been a most rewarding way to teach. The biggest challenge has been trying to explain the benefits of this type of learning to someone who has not tried it.

It's like trying to describe a gourmet dinner to someone accustomed to eating fast food.

I know many of you experience the same frustration when trying to sell a client or a senior executive on the idea of using a simulation rather than traditional teaching methods. One of the most frequent requests I get is for advice on how to communicate the value and efficiency of using simulations.

It seems that the best way to communicate the experience of a simulation is by presenting peoples' experiences as stories. In this issue of *Excursions* we tell a story about a participant that I will never forget and summarize the lessons that participants repeatedly report learning from their experiences with the simulation, *Paper Planes, Inc.*

Some people think I am exaggerating when I describe the broad applicability of this simulation. I am not. We have used *Paper Planes, Inc.* with school teachers and administrators, the governor of a state and his cabinet, factory workers, and NASA astronauts. The insights about the necessity of having shared goals, knowledge of the final product, removal of unnecessary organizational silos, and uncovering the source of problems rather than pointing fingers are similar across industries. I think the real difference in the value of simulations is that these learnings are "insights" rather than something participants have been told.

I hope this issue of *Excursions* will help you think of ways to communicate better to your clients the value of using simulations; and, I hope you will share those ideas with us.

- Chris Musselwhite, President

## Teaching Teams To Soar

Ten minutes into the presentation the trainer is acutely aware of Bob flagrantly reading the morning paper. Not only is Bob, a participant in a week long leadership development program, reading a fully opened newspaper, he is doing so while seated at the front of the classroom. While feeling annoyed, the presenter is not surprised by this behavior. Bob was identified as the program's problem child the first day and he has lived up to the early assessment for three days. The current program component is entitled "systems" and Bob's attitude towards "systems" is reflective of his attitude toward the entire program: "I am above this, I already know all of this".

Fast forward three hours and find Bob in the hallway outside the classroom; jumping, laughing, shouting and encouraging his classmates as he enthusiastically flies paper airplanes. Bob is "playing" (he's actually beyond play) the role of quality inspector in the simulation *Paper Planes, Inc.* Bob's evaluation later in the day provides the following reflection:

*"This simulation really captures the essence of the toughest issues organizational leaders face."*

*Paper Planes, Inc. participant*

*"I started the session believing this was just another simplistic exercise that couldn't teach me anything new. Boy, was I wrong.*

*This simulation really captures the essence of the toughest issues organizational leaders face: An understanding of how seeing anything less than the big picture creates divisiveness, lowers commitment, and lessens quality."*

The gestalt of this simulated experience is an eye opener for many of the participants whose companies have explored such popular business remedies as total quality, just-in-time, customer focus, continuous improvement, work redesign, self-managed teams, and time-based innovation. Many of them have latched onto one or more of these cures in efforts to remain or become

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competitive. The result has often been short term improvement that does not seem sustainable and the occurrence of new unanticipated auxiliary problems. The problem symptoms, in fact, seem to shift somewhere else.

The term "gestalt" is used to describe the experience of *Paper Planes, Inc.* because in its clinical sense, gestalt means the experience of seeing and understanding something in its "wholeness". It is this quality of seeing a problem in its entirety or within its "whole system" that poses the greatest challenge to organizations and their leaders and consequently offers the greatest opportunity for understanding and improvement.

*“When questioned for causes for the poor quality, typical responses are to blame others, point fingers and complain about the customer.”*

## The Simulation

*Paper Planes, Inc.*, presents participants with a traditionally designed work task of building paper planes. The work is divided functionally such that each person performs only a small piece of the overall job and consequently does not understand the overall process. These paper planes are needed by an international consortium for use in preliminary wind tunnel design tests for a proposed plane that will travel half way around the globe in two hours by flying to the upper limits of the stratosphere. Once each plane is completed it is inspected and tested by the quality inspectors before delivery to the customer. When questioned for causes for the poor quality, typical responses are to blame others, point fingers and complain about the customer.

The participants are given the opportunity to redesign the production process any way they choose. This redesign is an unstructured group activity. When the redesign is completed the participants are given another opportunity to again make planes.

This second run of the simulation produces phenomenally different results. Metrics used to compare the two runs of the simulation include cost of materials and labor, selling price to

avoid a loss, quality index and time to market.

## Lessons Learned

Bob reported his greatest learning to be **"the importance of everyone understanding the big picture"**. Other learnings from the simulation debriefs include:

**Having a goal or vision:** An understanding of the desired product or end result is essential. People are too often asked to work on a part of a task and do not understand how what they do contributes to the desired end result.

**Collaborative team work:** A lack of awareness of the interdependency of jobs results in finger pointing and blaming behavior. Collaborative team work is critical if this type of awareness is to develop. Collaborative team work can replace blaming behavior only if the team's task is viewed in its wholeness.

**Communication is essential:** No matter how traditional or innovative the work design, communication is essential. The act of constructive communication can do more than anything else to improve quality and productivity. However, if the work flow and organizational structure impede efforts to communicate rather than enhance them, then good communication will remain illusive.

**Structure gives rise to behavior:** The structure or design of work actually creates the negative, ineffective behaviors in individuals. When the work is redesigned by the participants and communication can take place, the same people doing the same task with the same materials and



time constraints demonstrate much more constructive and effective behavior. The responsibility for poor performance is usually a function of the system rather than individual incompetence. Yet, it is individuals who are sent to human resources or training programs for fixing.

**Quality and whole systems:** Quality is ultimately the effect of all the interactions within the entire system. The way the jobs within the system are designed and interfaced are directly reflected in the quality.

**Learning as continuous improvement:** The concept of continuous improvement is directly related to the degree to which the organization or system encourages risk and learning. If behavior that leads to mistakes is not encouraged then learning cannot take place and continuous improvement will never become part of the organization's culture.

**Adaptive or innovative change:** During the simulation redesign and debrief it becomes apparent that different individuals have different preferences for dealing with changes in the system. Discovery Learning's Change Style Indicator describes this continuum of preference as Conservers, Pragmatists and Originators. On one end of the continuum Conservers prefer to make small incremental and frequent changes, constantly improving the system. This preference is reflective of a continuous improvement process. On the other end of this continuum Originators contrastingly prefer more radical, wholesale change of the system. Originators are more likely to challenge the existing paradigm; to

think outside of the box. Participants typically experience their preferred style during the simulation. This difference in style is the greatest point of contention in the redesign process. Each preference for approaching system change is useful and each can have inherent problems, such as continuing to improve a dinosaur or throwing the baby out with



*“Conflict will emerge. Conservers, Pragmatists and Originators will bump heads.”*

the bath water. It is in fact the interaction and compromise of the three styles within a team context that can result in the most effective system change.

**Team participation requires process:** Given the success of the redesign, the redesign of the production process remains difficult. Conflict will emerge. Conservers, Pragmatists and Originators will bump heads. A "willingness" to participate collaboratively in team decision making does not guarantee the desired outcome. People thrown into a collaborative situation, especially those without experience operating in this mode, need assistance to guarantee success. The participants in *Paper Planes, Inc.* experience the struggle of

team participation and discuss how the redesign could have been even more effective with adequate facilitation. Managers who are skeptical of team participation to begin with often throw their people into an unplanned, unstructured decision making process and, as they flounder, the manager responds with "I told you so."

These learnings when examined in isolation look and sound great. Any good consultant could make a sound argument for any one of these as a viable solution to organizational problems. The dilemma is that taken in isolation each of these lessons will only result in the problem popping up somewhere else in the system. It is when these learning points are embraced in their wholeness that synergy is discovered. It is difficult to communicate with a whole system perspective. It is certainly easier to talk about JIT or total quality or self-managed teams. But with experiential learning and simulations such as *Paper Planes, Inc.* the dialogue becomes easier and the concepts become clearer. ●

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## What's happening at DLI?

### Under development:

#### *Conflict Assessment Instrument*

Discovery Learning, Inc. is currently testing a potential new product on Conflict Assessment. Over the next two months we will be asking interested parties to participate in the development of the assessment by completing a short survey. If you have an interest in becoming involved in this project please contact our office at 336-272-9530 and ask to speak with Kate Musselwhite or Donna Kelly.

#### *Discovery Leadership Profile, for Educators*

We are adding another targeted survey to our Discovery 360 series. 15 leadership categories comprised of 62 items make up this new 360 assessment designed for educators. This survey addresses the special competencies identified as critical to successful leadership in today's challenging school environment. To learn more or to request a sample report contact our office.

### Case Study published:

“Real-Life Learning Situations: Global media company uses simulations to nurture top talent” appeared in the February 2007 issue of *T&D Journal*. The case study describes how Torstar, a large Canadian media company with operations in over 15 different countries, uses a highly experiential program designed and delivered by Discovery Learning to unlock potential and to uncover hidden potential of their rising leaders.

### New online article:

Chris Musselwhite's article on “Building and Leading High Performance Teams” was posted in February on Inc.com's website. The article outlines competencies needed to build and lead high performance teams. Further, it defines the characteristics of high performing teams and the leadership skills needed to effectively lead these teams. To view the article visit [www.inc.com](http://www.inc.com) and go to their **Leadership** section or go directly to <http://www.inc.com/resources/leadership/articles/20070101/musselwhite.html>

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