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TEACHING STRATEGIC PLANNING. PROBLEM SOLVING AND DECISION MAKING WITH ENVISIONARY EXPERIENTIAL EXERCISES

Walter J. Wheatley, The University of West Florida
E. Nick Maddox, Stetson University
Robert H. Bennett.III, Florida State University
William P. Anthony, Florida State University

ABSTRACT

Successful executives usually have a clear vision of the direction they want their company to proceed. Recent research in the field of visualization indicates these innate processes may be important factors in such management activities as strategic planning, decision making and problem solving. The purpose of this article is to explain how experiential exercises employing visualization can be used to enhance these vital management skills of our students in the classroom.

INTRODUCTION

When one speaks of a business executive with "clear vision for the future" or "precisely visualized direction," they are referring to a remarkable individual who has a firm grasp on the numerous contingencies which might face their organization or them personally. They may have already considered potential action, which could be taken in response to most contingencies. Successful executives are often characterized as "visionaries." This is an extraordinary compliment, for humans have real difficulty as they attempt to manipulate concepts and situations they have never actually experienced or with which they lack familiarity and understanding. Humans have been shown to be quite limited in their ability to understand, represent, and create novel solutions to common problems, especially in rather complex and abstract management settings (Simon and Hayes, 1976; and Schwenk, 1984). For example, Matlin (1989) notes a number of rather startling limitations which characterize the human cognition and thinking process. She reports that a person in a "thinking" situation often calls on a standardized "problem solving set" for help.

People have an inability to go outside some subjectively created boundaries. Much of their knowledge goes unused. Their representation and understanding is limited in the sense that they become mildly innovative and creative and base their thoughts and actions on a restricted set of rules, values, programs, and well-rehearsed repertoires, (Perrow, 1986). People also invoke "short cut" heuristic, which are selective searches, which look at only small portions of the potential solution set. Heuristic are "rule of thumb" strategies that generally prohibit full understanding and optimal decisions or actions. They are a natural response to an ambiguous problem.

Metcalfe and Wiebe (1987) and Matlin (1989) argue that the most novel and creative solutions come only after incubation, the process of creating an internal representation of the problem or situation.

When people visualize and more coherently grasp a situation, they are able to inject more detailed knowledge. The problem situation takes on coherence, correspondence, and relationship with a plethora of background knowledge and skill. The individual can manipulate and thoroughly study what was once a rather ambiguous uncertainty. Clearer representation of ambiguous settings appears to be a major challenge if humans are to overcome the serious limitations which plague strategic planning, decision-making, problem solving, and other unstructured activities.

THE LINK OF VISUALIZATION AND CREATIVITY

We have found from our experiences in management education and training settings with a wide variety of classes and organizations that

use of visualization and creative thinking allows students and managers to create and actively manipulate vivid projections of often ambiguous, abstract settings. We know that they use "cognitive maps or mental frameworks of cause and effect relationships to help organize information. There is a multitude of useful information that falls below the level of consciousness. Often the causal maps are not well understood by the manager. We have learned that visualization experiential exercises and the scripts they entail can be used to make explicit the cognitive maps that they use in dealing with a broad variety of topics.

The focus of this article will be on explanation and description of experiential visualization techniques, which have proven useful in the classroom. We hope to draw attention to the practical use of such techniques to enhance the learning process. We have seen that visualization is effective at invoking a more complete and thorough use of our students' knowledge. Our experience has shown it to be fundamental to gaining access to intuition, creativity, and more complete assessments of business-related and interpersonal settings. As students experience the process of visualization, their thought becomes more divergent and innovative, leading to more imaginative and novel solutions to the ambiguous setting, which they face.

Athletes have long practiced mental imagery in an effort to enhance their performance (McWhirter and McWhirter, 1983). For example, many of us remember Mary Lou Retton's inspiring account of lying in bed on the night before capturing the gold medal, vividly imagining every move in her winning routine and considering every potential problem. Many may remember high-jumper Dwight Stones, who mentally practiced each high jump. Similarly, imagery has proven useful in aiding children's understanding of abstract subjects such as mathematics. It has also been used in medicine and therapeutic disciplines as treatment for depression and cancer (Kazdin, 1978). In all cases, the result has been more thorough consideration of the scenario and injection of greater knowledge and insight.

UTILIZING VISUALIZATION EXPERIENTIAL EXERCISES IN THE CLASSROOM

Management is made up of numerous episodic performance situations. While management students are usually taught through the rather abstract concepts of planning, organizing, staffing, leading, controlling, communicating, motivating, problem solving and so on, the actual practice begins when the student enters the workplace. As a newly hired subordinate, the graduated student is asked by a manager to perform a task. This task could be to produce a list of potential environmental opportunities and threats, formulate an organizational goal, conduct a hiring interview, calm an angry colleague, etc.

Most experienced managers would perform these episodes based on habit and convenience. They have their own style or heuristic method with which they are comfortable. The only forces, which may alter their habits, are prior failures or unfamiliarity with the task.

However, the student employee does not have any of these models from which to obtain guidance. In carrying out these activities, visualization activities attempt to make to form a new mental image as to how the behavior is to be performed in order to ensure the student employee subsequent effectiveness. Visualization, then, is a

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Naturally occurring phenomena with which humans are comfortable and use for vicarious practice

There are several areas where visualization has its greatest promise for enhancing, in the classroom, student managerial performance. Research with students and practicing managers tends to support the efficacy of the technique although much more research is needed (Maddox, 1987; Mason and Wilson, 1987; Maddox, Anthony, and Wheatley, 1985). The areas where we have seen that imagery holds significant promise are strategic planning, problem solving, and decision making.

Actually, the use of visualization is a combination and hopefully, a sublimation of experiential exercises that are all ready utilized in the classroom. Team creativity exercises where students envision certain aspects of management and draw them on flipchart paper using metaphors is part of the visualization process. Role-playing, where students place themselves into a script in order to emulate some management experience is also a major part of the visualization experience.

To utilize visualization in an experiential exercise, an instructor needs some very basic tools. First, the instructor creates a quiet and relaxing learning environment in the classroom. Next, the instructor asks the students to completely relax and try to place themselves into the scenario he or she is about to read to them. After, the visualization exercise has been completed the salient points from the scenario are discussed in an open classroom forum.

By placing themselves into the script, the students are able to draw upon all of their cognitive powers and actually vicariously experience the management activity presented in the script. Whether, their mental experience resulted in a positive or non-positive outcome, the students received management training in the comfort and safety of their classroom. That is the real beauty and efficacy of using experiential exercises utilizing visualization.

The mental imagery script or scenario is much like a director's script for a particular scene in that it states how a particular mental performance should optimally occur. The script or the scenario includes the verbal, symbolic, and interactional characteristics of a given situation or event. The script or scenario serves as a detailed model for appropriate performance in the situation.

What are the primary factors in this script? First, the script guides and provides a mental model of how the meeting should proceed? The script elaborates a clear interactional image of what is to be accomplished. Secondly, the script is positive. Scripts/scenarios succeed by fostering mental mindsets of desirable outcomes or consequences of choice and action. This does not imply that the technique ignores failure. As the script indicates, individuals are encouraged repeatedly to anticipate potential problems, issues, and questions. However, the emphasis is on ways of actively and positively managing the environment. In this way, imaginal techniques can promote both self-management and self-confidence.

In addition, the script/scenario links appropriate behavior to optimal consequences of action. The script/scenario, in effect, suggests this: If we do things in a pro-established, facilitative way, we can expect to experience a desired result. In other words, if individuals behave in a particular manner, a relevant, specific consequence will be forthcoming. Anticipating behavior and consequential linkages prior to actually experiencing the behavior is a key advantage to using imagery.

The remainder of this paper will focus on scripts that can be use as examples in developing experiential exercises involving visualization. These three key areas where we have seen that visualization holds

great potential are strategic planning, problem solving, and decision making.

VISUALIZATION SCRIPTS FOR STRATEGIC PLANNING

There are at least four aspects in the traditional strategic planning process where visualization seems to hold great promise. These aspects are environmental forecasting and scenario development internal organizational assessment, formulation of strategic goals, and establishment of strategies to achieve goals. Visualization techniques can also help student's better use quantitative data and qualitative information in the planning process. Here are some brief sample scripts, which can help with the four above steps in strategic planning. Actually, these examples are abstracts of more complete scripts, which might be used.

Environmental Forecasting and Scenario Development

You are sitting at your desk five years from today. Your secretary walks in with a stack of newspaper articles which summarize the big business events in your locality and in the nation over the past year. As you pick up the stack, you immediately see the first headline. What does it say? How did this event affect your company? Mentally record the observations you experience.

Longer scripts may ask planners to mentally experience a raft trip down a swirling river. The river is a metaphor for the future. Students are asked to visualize each rock, rapid, or bank they hit or experience as a future event affecting their company. Other scripts can be used and development of good scripts is limited only by the creativity of the script author. Obviously, students try to envision events in the future that will impact on the company. When done as a group in a workshop, the technique can be very effective far scenario building and can be used to supplement traditional brainstorming methods.

Internal Assessment

See yourself floating above the production facility you manage. The roof gently lifts off and you are able to survey the actions of people and the entire operations of the production facility. You gaze down into the building and hear people working, talking, interacting, and dealing with customers. Without being seen, you are able to witness all of the activities in the facility. What are the employees saying? What are the company's major problems? What are they proud of? What are they doing really well? Do you see deficiencies?

A longer script asks students to visualize that they are touring a museum of their company. They go from room to room. Each room represents either a division, product line, or function and is full of artifacts and images. Students are asked to describe the various artifacts and images they see in each room, to label them as a metaphor of company effectiveness, and to indicate the position or detrimental impact of each imagined factor.

Formulating Strategic Goals

You are wandering across the desert and stumble on an Aladdin's lamp. The genie appears and says that you have one wish for each of the areas of human resources, production and operations, marketing, etc. He says, "What do you want me to make better in human resources?" You think hard and start to see the things that need improving, that need changing. What do you see? What do you tell the genie? What does the improved situation look like? What are your overall goals in human resources?

A longer script may ask managers to imagine that they are lost in the woods. They come to a crossroads of six paths. Each path represents a different course of action available to you and the company. Not all

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paths lead out of the woods. Some are shorter than others. Some are smooth. Some *are* rocky and tumultuous. Explore each choice's path and the goal at the end of each path. What must be done to reach each goal? What stands in the way of each goal? What goal paths are best suited for the company?

Determining Paths to Achieve Goals

Imagine that you are a puppet master and the show you are about to give is the path your company must take to reach its goals. The key people to help the company reach its goals are marionettes and just this once you have the power to make them act out every behavior and action necessary to help the company reach a specific goal. What specific behavior do you have each puppet engage in? What do you make them say or do in order for the company to meet each goal? What problems do you foresee in the puppet show? What are the props that the puppets will need in order to reach the goal?

A longer script asks students to imagine that they are a ship captain plotting a course through the Caribbean. The ship represents their company. Each island, shoal, and reef represents a task or hurdle, which must be negotiated. Planners then visualize what is required to successfully guide their ship through the Caribbean.

VISUALIZATION SCRIPTS FOR PROBLEM SOLVING AND DECISION MAKING

Visualization seems to show promise for two key problem solving and decision making activities: distinguishing the problem from the symptoms (getting at the core of the problem) and deciding on and implementing a course of action.

Below are sample scripts for these exercises.

Getting at the Core of the Problem

Imagine that an entire problem situation is a steamed artichoke placed on a dish in front of you. There are a number of symptoms that you have noted about the problem and each of the artichoke's leaves represents these symptoms. As you eat the artichoke, you strip off the leaves one by one and eat them, moving ever closer to the heart and the real problem. Describe each leaf that you eat as a symptom. Describe the artichoke's heart, the real problem at hand. What do you see?

A longer script may ask managers to imagine that they are digging for buried treasure on a deserted beach. The treasure is buried very deeply in the sand. The sand is packed tightly and requires much effort to dig through. The sand represents the barrier that hides many problems while the treasure is the problem itself.

Deciding and Implementing a Course of Action

Imagine that you are the pilot of a hot air balloon about to enter a race. If you throttle hot air too quickly into the balloon you will rise

Much too fast and be blown off course, missing the mid-air currents you need to navigate correctly. However, if you do not rise fast enough you will crash into nearby trees and plummet into the ground. Let the balloon represent a project you must complete. The wind and the trees represent obstacles to your completing the project while the mid-air currents represent your staff and other resources, which will enable you to complete the project. The finish line symbolizes the completion date for your project. You see the obstacles and can assess the air currents? What do you think? Do things look favorable in this race?

A longer script may ask students to envision themselves in front of the people responsible for implementing the decision that will be made. The students will mentally role-play the reaction of each person in the room to the announcement. Then the student mentally role-plays the person quickly going through the sequence of steps they must follow in order for the decision to be implemented.

There are many other potential applications for visualization. We have chosen a few applications, which we have used specifically in actual business classrooms and in our research. Visualization appears to be a very powerful and rich process for use in enhancing student management performance. Visualization allows the student to realize so much more information that was probably not considered without visualization.

It goes without saying that much, much more additional research is needed in utilization visualization in the classroom. There will, no doubt, be some mistakes made in applications of the technique. As it stands now, experiential exercises employing visualization offers a safe and economical way to improve student management performance. In addition, it has proved to date to be a very exciting, energizing, and effective means to provide transfer of knowledge regarding management activities tool.

CONCLUSION

Our ongoing research and teaching efforts show that experiential exercises that incorporate visualization holds great promise for improving student management skills. This is particularly true for skill-specific management behavior such as goal setting and planning, problem solving and decision making.

While imaginal techniques are widely used in such diverse fields as sports performance, guidance and counseling, medicine, and education, it has received minimal attention as an educational tool. Certainly more research and evaluation is needed as to the efficacy of this technique for enhancing the student learning process.

REFERENCES

References Available Upon Request.