VISUALIZATION AND GUIDED IMAGERY IN THE ORGANIZATIONAL BEHAVIOR CLASS: AN EXPERIENTIAL, EXPLORATORY APPROACH

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

ABSTRACT

THIS PAPER IDENTIFIES TEACHING AREAS WHERE MENTAL IMAGERY TECHNIQUES CAN BE APPLIED **EXPERIENTIALLY-ORIENTED** AN ORGANIZATIONAL BEHAVIOR CLASS. BACKGROUND INFORMATION ON MENTAL **IMAGERY** IS **PROVIDED** AS IS **BRIEF** DESCRIPTION OF THE IMAGINAL METHODS USED IN SKILL AREAS WITHIN O.B. GUIDELINES FOR THE USE OF IMAGINAL TECHNIQUES ALSO PROVIDED.

INTRODUCTION

During the 1980s, increasing attention has focused on social cognitive aspects of organizational experience (Gioia & Manz, 1985). A growing area of interest is the application of mental Imagery or imaginal techniques in training, creativity, problem-solving, and strategic planning venues (Anthony, Wager, Maddox, & Wheatley, 1988; Maddox, 1987; Wheatley, 1985). Findings from these and other studies including anecdotal reports from training workshops suggest that mental imagery is a critical process in organizational and personal thought and action, especially those areas that are performance-based (Anthony, 1988; Decker, 1983; Manz & Sims, 1980; 1981).

In general, imaginal techniques have been rarely applied to the O.B. classroom, although Lau and Shani (1988) have recently added a visualization technique to the O.B. textbook. The lead author of this piece has used guided imagery and visualization in O.B. classes to: 1) teach stress management; 2) reduce test/performance anxiety; 3) improve brainstorming; and 4) promote career exploration and discovery with students. Each of these skill areas is important as students learn "self-management" before entering the workforce.

WHAT IS MENTAL IMAGERY?

Mental imagery includes innate, multi-sensory, cognitive-perceptual processes composed of spatial and visual elements experienced in healthy persons as "pictures", "movies", or mental models of causal relationships. Daydreams, fantasy excursions, mental reverie during boredom, and covert rehearsal of future events are experiences that are largely imaginal in content and focus.

Imaginal processes are critical in associative and vicarious learning experiences, as well as in creative, inferential, and divergent thinking (Arieti, 1976; Bandura, 1977; Barron, 1982; Isenberg, 1984). Such processes also play an important role in the encodement of symbolic aspects of experience (Paivio & TeLinde, 1982). Mental imagery allows individuals to form schemas which are used for understanding and sense-making in social interchanges (Taylor & Crocker, 1981). According to Mitchell, Rediker, and Beach (1986), mental imagery exists in four basic categories operational at both individual and organizational levels and contributing to behavior and interchange between persons:

1) <u>Self-Images</u> - These images reflect one's perception of self and guidelines for behavior based on this perspective of self-in-the-world;

2) <u>Trajectory Images</u> - These images allow individuals to replicate and explore various choices that are open to them in the safety of their mind's eye.

3) <u>Projective Images</u> - These images provide a venue for chronological sequencing and procedure for future scenarios that may reign are the antiquented.

that may arise or be anticipated.
4) Action Images - These images explicate exact strategies that can be used for goal realization.

These four types of mental imagery allow individuals and organizations to plan for, understand, and take action in complex social situations.

Research on mental imagery in areas beyond business Research on mental imagery in areas beyond business demonstrates that imaginal techniques are effective tools in skill learning, enhancement of self-image, creative and analytical problem-solving, and enhancement of motor skills (Dueck, 1976; Galyean, 1983; Weaver & Cottrell, 1986; Wheatley, Maddox, Anthony, & Coe, 1987). As previously noted, Lau and Shani (1988) example one of the few applications of mental imagery techniques in business education. This report endeavors to legitimize imaginal techniques as an important part of the experiential learning method in O.B.

VISUALIZATION AND GUIDED IMAGERY **TECHNIQUES**

The two techniques applied within the lead author's O.B. classroom are visualization and guided imagery. Both methods meld student's private experiences and imaginations with prompts and cues that "shape' their imaginings toward a specific learning objective. External cueing and guidance by the Instructor focuses students' attention on the materials and helps them "tune-in" to their cognitive and perceptual as well as visual and verbal resources for thought and action (Cartwright, 1983; Singer & Pope 1978) Pope, 1978).

<u>Guided Imagery</u> is the controlled use of imaginal scenes or scripts to direct students' imaginings. The script represents the focus for imagining and can involve several different activities including:

1) mental rehearsal of an event such as a job interview; 2) creative projection such as imagining one's first day on the job; 3) recall of past work experiences; and 4) elaboration of "what if" scenarios such as - how will the economy change with another oil crisis?

<u>Visualization</u> is a freer and more spontaneous imagery practice technique that features less direction and scripting from the instructor. Students may be asked to consider a problem, relax, and explore their imaginations for potential analogies and problem solutions

to the problem. For example, students can be given a problem statement such as, What really motivates people at work? They could be cued to revisit their own or vicarious work experiences to delve into this question. Class processing of the ideas and insights that emerge build a well-articulated understanding of motivation.

Two factors are critical in the effective use of these techniques. First, all imaginal practice must be appropriately paired with a relaxation exercise to induce a state of "mind focus" and attentiveness to the prescribed imaginal technique. Secondly, and congruent with process learning methods, all ideas that are generated individually during imaginal practice should be aggregated and discussed by the class. This helps individual students elaborate on their own cognitive and emotional tendencies.

Use of guided imagery and visualization techniques over the past three years in OB classes demonstrates that they are safe, easy to learn and apply, and experienced as enjoyable and useful by students.

APPLICATIONS IN THE PROCESS-ORIENTED OS CLASS

A pattern of effective application of imaginal techniques has naturally emerged from class experiences with and feedback from practice sessions with students. Initial practice sessions deal with relaxation/stress management and then progress to the other areas, which are addressed with imaginal techniques. This occurs because relaxation practice is a necessary component of imaginal training and the sequencing, specified below, acclimates students incrementally to the process, while considering personal and organizational problems.

Relaxation/Stress Management

Chronic stress and anxiety cause considerable emotional and physical impairment in the workplace. Training students in relaxation allows them to use inner resources to cope with external stressors and to reinforce a positive self-image.

Imaginal techniques have often been applied in stress management and related training or therapeutic areas (Dycknan & Cowan, 1978; Goid, 1982; Miechenbaum, 1983). In the OE class, three methods are used so students learn to find and use a relaxing "space" trough imagining. Each session lasts from 12 - 15 minutes.

- 1) <u>Progressive Relaxation</u> This method requires that students follow a script by focusing upon and tightening specific muscle groups from toes to head. As they do so, they are cued to imagine warmth and rest replacing accumulated stress and tension. This technique is direct, generic, and produces profound relaxation.
- 2) <u>Peaceful Scenario Practice</u> This technique asks students to select and imaginally place themselves in their favorite relaxing venue be that the mountains the beach, or a country scene. Students are then cued to envision sights, sounds, smells, movements, and emotions they experience as they travel to these locales in their minds. They are also cued to "tune-out" problems or concerns as they elaborate their vision
- 3) Breathe Focus Here students are cued to focus on the

ebb and flow, inhalation and exhalation, of their breathing. First, they mentally count an inhalation as "1" and an exhalation as "2". This continues for several minutes and is replaced by a cue to imagine the color of the air being drawn in and expelled. With inhalations, students are cued to imagine a soothing, positive color, while with exhalations they are asked to imagine colors associated with purging of negative or tense emotions. Invariably, light colors are paired with inhalations and dark colors with exhalations. This exercise, by consolidating focus, also leads to enhanced relaxation.

Students lean all three techniques and are encouraged to develop their own scripts for home practice of relaxation. With three methods available, almost all students can select one with which they are comfortable. After three or four relaxation practices and processing of student reactions, they are ready to go forward to other applications.

Performance/Test Anxiety

Despite the reality that process leaning contexts tend to downplay testing, students are usually anxious about testing in general. To help students cope with performance anxiety in testing and other venues, the second unit focuses next on helping them rehearse a relaxed, poised approach when encountering evaluation. Of course, a strong statement is offered by the instructor that preparation plus relaxation equates with optimal performance in any activity.

Initially, there is an open discussion of testing and performance and the types of stress and anxiety that students' experience during such episodes. The instructor carefully notes the students' concerns because these factors become the foundation for creating scripts. Next, the instructor writes a script that cues students to envision themselves preparing for an exam in the appropriate ways (keeping up with assignments and readings, working with other students in the class, rehearsing potential responses to exam questions). Then, the script itemizes a rehearsal scenario the students can use when they are about to experience a test or performance episode. Ingredients in this cueing include: 1) imagining that they approach the event with a level of confidence in their ability to perform; 2) seeing themselves using relaxation prior to and immediately before the performance episode to instill focus and attentiveness; 3) envisioning themselves

Students who benefit most from this technique are the ones who take the initiative and practice the exercise at home on a consistent basis prior to examinations. As with all imaginal practice, this technique proves most powerful when integrated into the overall coping repertoire of the individual. For most classes, the script is presented twice and made available to any students who wish to use it at home.

Brainstorming

Even before students engage in classroom brainstorming on management issues or problems, they are taught to imaginally brainstorm while relaxed and focused on a specific problem or stimuli. All brainstorming activity is accompanied with specific cues that shape the imagining of students. Such cues may include:

"During the next few minutes you are going to build the perfect organization. Let your imagination roam. Don't censor or evaluate

your images or impressions. Just imagine that you can create the perfect company and begin noting the ideas and insights you have as you think about how people will get along in your organization. Imagine how you want to treat employees and how you want the employees to feel about your leadership and your organization. Build that perfect organization in your 'mind's eye'. Use all your creativity to make it just right."

OR

"We have talked about leadership this week. You'll now take some time to envision the best leader you have ever known. Take a moment to bring his/her face to mind. Can you see this individual clearly? Now think about this person and the ways that he/she is a leader. What values are important to this leader? What skills does he/she use to lead others? What traits does he/she exhibit that are leadership indicative? How do other people feel about this individual? Take more time to study this person in your imagination. Take mental notes of your impressions to share with your group."

From both script excerpts a great deal of information can be gathered, recorded, and used for building models and theories of actual behavior in organizations. Students are not dependent on the instructor to provide a theory, but become active artists in the theory-building and problem solving process. This is very congruent with the underlying assumptions of process leaning methods.

Students report that they enjoy imaginal brainstorming sessions because they are the authors or creators of ideas that they can then apply to the world. They become partners in the learning task rather than passive reactors to the information provided by an instructor. Use of imaginal scripts in key areas of OB also leads to interesting contrasts in responses among students to common problems in management. This tends to expand and open their perspectives to ideas they may not have previously considered.

Career Development

By the time that students consider this unit in class they are fairly comfortable with imaginal practice and need little direction for relaxation or mental imagery excursions. In career exploration and discovery, visualization is often used to help students define: 1) the nature of their "ideal job"; 2) the short-term and long-term career goals they hold; 3) the strategies they will use to reach these goals; 4) the various career paths they may explore; and 5) the problems encountered and coping strategies applicable to mid-life, retirement, termination, and career dissatisfaction.

By having students project themselves into certain situations in lifestyle and career development, they learn about their own reactions to problems in the career realm. Further, they begin scripting their options for change and transition far in advance of the onset of a problem. As students discuss their imaginal experiences in class, they develop a broader and more realistic view of the possibilities and difficulties that evolve in a career lifecycle.

Guided imagery can also be used to help students anticipate such things as their first job search, the first few weeks on a new job, the effects of "reality shock syndrome", and the dynamics of a mid-life crisis. Overall, imaginal techniques appear to be beneficial to students as methods to supplement other class exercises such as role-playing, simulations, and games, especially in areas where both content understanding and skill enhancement are learning objectives.

GUIDELINES FOR THE USE OF IMAGINAL TECHNIQUES

General guidelines for the use of imaginal techniques and for effective script writing have been provided elsewhere (Maddox, Wheatley & Anthony, 1988). Below are some specific guidelines for use of these methods in an OB class.

- 1) The instructor should practice and become comfortable with all imaginal techniques before applying them in class. If you are unsure of yourself or nervous in the use of the techniques, this will be apparent to your students and the effectiveness of the technique will be minimized.
- 2) Prior to using imaginal techniques, the instructor should clearly explain how and why these methods are being used. Further, he/she should discuss any problems students may have with the techniques. Your explanation should encompass imaginal techniques as types of "learning by doing" methods that help individuals access and use their inner creativity, It is important to demystify the techniques so that students understand that they are not to be hypnotized, manipulated, or subjected to an unpleasant experience. Participation in imaginal exercises should be made voluntary to protect the integrity of students who have reservations that cannot be resolved. When a student does react negatively to a technique, you should share time to discuss the matter fully.
- 3) Instructors should collect materials on imaginal practice and put these "on reserve" in the library. This permits students to explore the technology outside of class. Two short books, <u>Visualization</u> (Bry, 1979), and <u>Creative Visualization</u> (Gawain, 1982) are good primers on the topic.
- 4) Instructors should write good scripts that articulate the specific learning objectives within the imaginal exercise. Objectives should be stated as clearly as possible before imaginal practice and need to be reiterated within the practice script. If a script is poorly crafted or if you present it in an uneven manner, you may cancel positive aspects of the experience for some students. Quite frequently within your scripts you should cue students to make mental notes of their ideas and impressions for sharing with others in the class. This facilitates transfer of ideas from the mental to the classroom environment.
- 5) When presenting scripts, instructors must reduce external sources of distraction so the students' attentions are focused on the script. You may dim the lights, close blinds, and allow students to assume whatever comfortable posture they wish to achieve relaxation and mental focus. Some students will want to stay in their seats, while others will sprawl on the floor. Posture doesn't matter as long as each student finds that position which is most comfortable to him/her.
- 6) Instructors should limit the duration of sessions to no more than fifteen minutes. Our experiences have shown that longer sessions with longer scripts lead to "mindwandering" on the part of trainees. Students can start to daydream about extraneous matters if scripts are too long. Limiting time can also ensure that full

- discussion of the exercise will occur within a given class meeting. Of the 15 minutes, three to four minutes should be used to induce relaxation with the bulk of time devoted to script presentation and imaginal elaboration.
- 7) Instructors should expect that students won't always follow the script "to the letter". There will be divergence from the script. Frequently, these departures are quite interesting to others and provide good input during discussion. We only suggest to trainees that they follow the script to the best of their abilities and attend to the mental experiences they have during the exercise. Instructors should also expect some students to fall asleep during initial practice exercises. As they become more acclimated to the experience, they will learn to "hold focus".
- 8) Instructors should periodically encourage students to create their own scripts as a homework assignment or extra credit option. These scripts can then be reviewed and applied in class where appropriate. Some of the best imaginal scripts are written by students who have a different perspective on a topic from the instructor.

The guidelines provide a basis from which to begin exploring the introduction of imaginal technologies in the classroom. As noted, guided imagery and visualization are enjoyable and interesting breaks from the routine of even the most adeptly run OB class.

RESEARCH IMPLICATIONS AND CONCLUSION

While these authors have strong anecdotal and feedback information from students and managers that they benefit from the use of imaginal techniques in learning environments, we have yet to stage a formal research project on OB class applications. However such a project is scheduled for Spring 1989 at Stetson University. This study will measure both the reactions of students to the techniques and various outcome variables including: 1) improvement in overall imaginal ability; 2) verbalizer-visualizer orientation; 3) participation grade as measured between effective and effective visualizers; and 4) change in problem-solving efficacy. A pre-test/post-test design will be used in this study.

A second project is anticipated for the Fall 1989 with a second OB class where no imaginal exercises will be used. The two classes will be compared on the aforementioned variables to provide a rudimentary control vs. treatment group comparison of outcomes.

During Winter Term 1991 at Stetson University, a special class entitled, "Envisionary Management" will be offered. The class will focus on the use of imaginal techniques in many managerial domains.

As with most experiential learning methods, the benefits of imaginal techniques may not be discernible in the immediate present. However, it is likely that in the future students who experience such techniques will be more comfortable with and adept at using their imaginations for organizational learning and management in the "real world". This paper has overviewed exploratory work on the use of these techniques as experiential leaning methods. These methods hold promise for management education and management development and are likely to become more commonly used in both the classrooms and the training departments of the future.

REFERENCES

Anthony, W.P., Wager, J., Maddox, E.N., & Wheatley, W.P.

- (1988). Imaginal technology and management information processing: Training implications. Technological Innovation and Human Resources, Volume 2: Technology and End User Training, under submission.
- Arieti, S. (1976). <u>Creativity: The Magic Synthesis</u>. New York, Basic Books.
- Bandura, A. (1977). <u>Social Learning Theory</u>. Englewood Cliffs, N.J., Prentice-Hall.
- Bry, A. (1979). <u>Visualization: Directing the Movies of Your Mind</u>. New York: Harper and Row.
- Cartwright. D. (1983). Studies in imagery and identity. <u>Journal of Personality and Social Psychology</u>, 44, 376-384.
- Decker, P.J. (1983). The enhancement of behavioral modeling training of supervisory skills by inclusion of retention processes. <u>Personnel Psychology</u>, 35, 323-332.
- Deuck, K.G. (1976). Imageability: Implications for teaching. <u>Journal of Geography</u>, 75, 135-148.
- Dycknan, J.M., & Cowan, P.A. (1978). Imagery vividness and the outcomes of in vivo and imagined scene desensitization. <u>Journal of Consulting and Clinical Psychology</u>, 46, 1155-1156.
- Galyean, B.C. (1983). Guided imagery in the curriculum. Educational Leadership, 40, 54-58.
- Gawain, 5. (1982). <u>Creative Visualization</u>. New York: Basic Books.
- Gioia, D.A., & Manz, C.C. (1985). Linking cognition and behavior: A script processing interpretation of vicarious learning. <u>Academy of Management Review</u>, 10, 527-539.
- Goid, S.R. (1982). Imagery elaboration and clarity in modifying college students' depression. <u>Journal of Clinical Psychology</u>, 38, 312-314.
- Isenberg, D.J. (1984). How senior managers think. <u>Harvard</u> Business Review, 62, 80-90.
- Lau, J.B., & Shani. A.B. (1988). <u>Behavior in Organizations: An Experiential Approach</u>. 4th Edition. Homewood, ILL: Irwin Press.
- Maddox, E.N. (1987). The effects of problem solving strategy and outcome expectancy cues on creative problem-solving performance. Unpublished Doctoral Dissertation. Tallahassee, FL: The Florida State University.
- Maddox, E.N., Anthony, W.P., & Wheatley, W.J. (1987). Creative strategic planning using imagery. <u>Long Range Planning</u>, 20, 118-124.
- Maddox, E.N., Wheatley, W.J., & Anthony, W.P. (1988).

 Mental imagery scripts: Guidelines for more effective usage in training and development. Training and Development Journal, under submission.
- Manz, C.C., & Sims, H.P. (1980). Self-management as a substitute for leadership. <u>Academy of Management</u> <u>Review</u>, 5, 361-367.

- Manz, C.C., & Sims, H.P. (1981). Vicarious learning: The influence of modeling on organizational behavior. Academy of Management Review, 6, 105-113.
- Miechenbaum, D. (1983). <u>Stress Reduction and Prevention</u>. New York: Plenum Press.
- Mitchell, T.R., Rediker, K.J., & Beach, L.R. (1986). Image theory and organizational decision making. In H.P. Siiiis and D.A. Gioia (Eds.), <u>The Thinking Organization:</u> Dynamics of Organizational Social Cognition. San Francisco: Jossey-Bass.
- Paivio, A., & TeLinde, J. (1982). Imagery, memory, and brain. <u>Canadian Journal of Psychology</u>, 36, 243-272.
- Singer, J.L., & Pope, K.S. (1978). <u>The Stream of Consciousness: Systematic Investigations into the Flow of Human Experience</u>. New York: Plenum.
- Taylor, R.N., & Crocker, J. (1981). Schematic bases of social information processing. In E.T. Higgins, C.P. Herman, & M. Zanna (Eds.), <u>Social Cognition: The Ontario Symposium</u>. Hillsdale, N.J.: Eribaum.
- Weaver, R.L., & Cottrell, H.W. (1986). Imaging: Classroom instruction technique. <u>The Clearinghouse</u>, 59, 268-271.
- Wheatley, W.J. (1985). Enhancing Strategic Planning Through the Use of Guided Imagery. Unpublished Doctoral Dissertation. Tallahassee, FL: The Florida State University.
- Wheatley, W.J., Maddox, E.N., Anthony, W.P., & Coe. F.S. (1987). Enhancing education through the use of mental imagery. Reading Improvement, 24, 150-159.