I step of the exercise, they identify the factors least favorable, although not optimal, for creativity. When I ask teams in LS organizations to identify the factors they believe most influ-

mental for creativity and actively pursues the

mentation is necessary, step three of the exer-

The information on the set of factors and their relative importances needs to be a part of I.S. students' knowledge domain. Our re-

search provides that information. This infor-

mation has its associated application, that is, for creativity to help the U.S. regain its com-

petition. The team creativity aspect in the previous

section is the key factor in the team's climate for creativity. Ideally, the man-

ager to whom the team report is well aware of the key factors for positive environ-

ment for creativity and actively pursues the

provision of those within her/him's realm of re-

sponsibility. Those factors should be covered

in the project management course in the I.S. curricu-

ulum. Team members have equal responsibility for ensuring a positive climate for creativity. My research shows that more than half of the key factors affecting climate can be influenced by the team, irrespective of which the man-

ager is doing [6]. Stated another way, a team re-

sponsible to a non-supportive manager can

not only in the traditional leadership roles such as director, producer, coordinator, moni-

tor, and so on, but also in the new roles which empower and enable, such as mentor, counselor, and coach (4). Recent lead-

ership studies argue that the practice of em-

powerment—or instilling a sense of power—is at the root of organizational effectiveness and that there is an increasing need for more em-

powering leadership such as that embodied in the mentoring, counseling and coaching roles [5].

MENTORING

A mentor is an experienced, productive manager or leader who relates well to some-

one who is less experienced and attempts to help that person develop within and for the

benefit of the organization (6). A mentor is engaged in the development of people through a caring, empathetic orientation (7).

COUNSELING

Leaders are not expected to be professional counselors with advanced training in the be-

havioral sciences, yet leaders commonly fulfill a counseling role in the context of a help-

ful, supportive leader—subordinate relationship, where the helper or coun-

selor is trying to influence and change the behavior of the receiver in a way that will be helpful, supportive, or positive. In this relationship, the helper has both parties needs, values, and feelings that influence their behavior in the relation-

ship (8). One of the factors which helps dif-

ferential is empathy. Being empathetic in turn involves being sensitive and having an understanding of the situation as seen through the other's eyes (9). To do this one must listen. Listening is the most basic of all the counseling skills. In fact, in client-cen-

tered counseling, listening is the primary

Leadership is changing, the leadership role is evolving. At one point in our history, ship captains could fire sailors who did not obey, man-

ag ers could fire employees who would not work, and teachers could expel students for talking back. The person in charge, the leader, had unquestioned authority to command, compel and direct. Although we might still occasionally wish to kill haul a troublesome subordinate, this kind of unquestioned au-

thority is a thing of the past. Today, the leader must focus on persuading or influencing rather than ordering others to perform [2]. This view of the leader is a new paradigm for management. It is a new set of assump-

tions, everyday truths, and conventional wis-

dom almost beyond the proven methods of how they work in organizations. The past management paradigm focused heavily on control, order and compli-

ance, with the consequence that people be-

came objectified, measured, and expended. This new paradigm focuses on discovering ac-

tions that enable and empower people to con-

tribute to the organization. The new leader, with less hostility and alienation than the con-

rol model entails (3). To be effective leaders in this new era requires that we be proficient

The need for creativity improvement

throughout I.S. was identified in my 1988 Delphi study of CIOs. When asked to identi-

fy the top 20 issues for the decade of the 1990s, CIOs rated the need for more cre-

ativity in 6th place. When the study was repli-

icated in 1992, that issue had risen to 5th place in the rankings. It is enigmatic that I.S. has

worn blinders about use of specific methodol-

ogy for improving creativity. Blake Ives, editor of MIS Quarterly, expressed this enigma very

well in his editorial summary of my article on creativity in the December, 1993 issue of that jour-

nal (9). "System analysis and design books have a common shorthand. They focus on analysis of the old system and documenting and implementing the new, but they give scant attention to conceptual design. DeMarco noted in 1978, 'It is at this time [after analysis of the old system] that the analyst exercises his [or her] experience and imagina-

tion to come up with the new system concept...' I won't tell you how to go about it, but I will offer a tool that I call the 'invention process.' Fourteen years later, Tom Davenport found himself at a similar loss in describing how to re-engineer business processes. Ironically, there is less to say about the design phase of process innova-

tion than about the activities that lead up to it. The design activity is a matter of having a group of intelligent, creative people review the information collected in earlier phases of the initiative and synthesize it into a new process." Ives concludes: "How curious that this creative process, so fundamental to our profession, remains as unplanned, large-

ly unexplored, and, to a large extent ignored." This is the reason that the national curricu-

lum committee, comprised of I.S. academi-

cians and practitioners, chose to include explicit content about creativity in the nation-

al curriculum recommendations. Hopefully, this article will assist faculty in implementing those recommendations.

REFERENCES


CONCLUSIONS

I.S. students need to understand the impor-

tance of improving personal and team creativity. With this under-

standing they are more motivated to acquire a domain of knowledge about creativity and a perspective into what creativity is.

A Classroom Exercise for testing the Information Systems Manager as Leader: Mentor, Counselor, Coach

ABSTRACT: The role of the information Systems Manager as leader has evolved from that of authoritarian figure to a person who must function as the leader to the leader as mentor, counselor, and coach. In order to perform these functions, the leader must learn to listen effectively, espe-

cia lly when the other party's interpretation of events differs from that of the leader. This pa-

per presents a classroom exercise which allows a student to role-play as a member of a prepara-

tory professional seeking to practice that phase of information systems management. The set-

ting is a typical but potentially volatile situa-

tion in which both the manager and the employee have been influenced by selective percep-

tions, resulting in two differing interpre-

tions of the same scenario.

KEYWORDS: Information Systems Management, Managerial Leadership, Effective Communication, Interpersonal Relationships Training

INTRODUCTION

Information systems (I.S.) educators recog-

nize that preparing students for I.S manage-

ment roles requires more than just providing an adequate technical foundation. Leadership skills for I.S. managers are rated as among the most desirable traits by both I.S. educators and top executives [I]. However, just as technolo-

gy is changing, the leadership role is evolving. At one point in our history, ship captains could fire sailors who did not obey, man-

ag ers could fire employees who would not work, and teachers could expel students for talking back. The person in charge, the leader, had unquestioned authority to command, compel and direct. Although we might still occasionally wish to kill haul a troublesome subordinate, this kind of unquestioned au-

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selor is trying to influence and change the behavior of the receiver in a way that will be helpful, supportive, or positive. In this relationship, the helper has both parties needs, values, and feelings that influence their behavior in the relation-

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leader be adept at persuasion. To be effective in this new role the leader must be capable of powerful leadership such as that embodied in the coaching, consulting, counseling and mentoring skills [10].

COACHING

Coaching refers to the managerial or lead-

ership responsibilities of creating, by communica-

tion only, the climate, environment, and context that empowers individuals and teams to generate results [3]. The key to the art of coaching is communication [11].

Again, these newer roles require that the leader be adept at persuasion. To be effective in this new role the leader must be capable of powerful leadership such as that embodied in the coaching, consulting, counseling and mentoring skills [10].
these newer roles of the leader require that leaders make greater use of personal power rather than positional power. Personal power is power with and from people, not over people, which implies that we must be able to influence and persuade others [12]. In fact, today leadership is often defined as attempted work related problem. You will need about 30 minutes to conduct the activity. Give one student a copy of the Instructions for the Director of the Systems Analysis Department (see Appendix A) and the other a copy of the Instructions for the Systems Analyst (see Appendix B). If possible, assign the roles at

"To be effective leaders in this new era requires that we be proficient not only in the traditional leadership roles such as director, producer, coordinator, monitor, innovator and broker, but in the newer roles which empower and enable, such as mentor, counselor, and coach."

influence. By definition, this makes everyone a leader, as we all attempt to influence others. The question is not whether or not an Information Systems manager is a leader, for we all are. The question is, how effective is that leadership?

This paper presents an exercise in which students will have an opportunity to test their leadership skills in a situation that is typical, yet potentially volatile.

TESTING LEADERSHIP SKILLS

The following exercise is based on one scenario from two different points of view. Because few managerial issues have clear-cut answers, the exercise is written in such a way that each viewpoint is influenced by selective perception. Selective perception is the tendency to see problems from our own perspective, so that our own life experiences distort our view of the situation [13]. We can overcome this evaluative tendency if we listen with understanding. Listening with understanding means that we need to see and hear the expressed idea and attitude from the other person's point of view, sensing how they feel [14]. Above all, we need to avoid being judgmental or jumping to conclusions [15].

INSTRUCTIONS

The exercise will involve a hypothetical situation in which students will play the roles of a manager talking with a subordinate about a the class meeting prior to the one during which you plan to present the scenario, instructing students to learn the role but not to discuss it with anyone. If that is not practical, let the students have about fifteen minutes to read the instructions while the rest of the class engages in a quiet activity. Then act out the scenario, ad lib. Neither student is to read the other's Instructions until the activity is completed.

AFTER THE SESSION

The two active participants in the scenario should be given the first opportunity to comment on what happened, and then classmates should respond. Students can gain insight by giving feedback and by discussing the following:

1) Would the performance of the Systems Analyst now be better, or worse? Why?
2) Has the issue been resolved to the satisfaction of the Director of the Systems Analysis Department? Has it been resolved to the satisfaction of the Systems Analyst? Why or why not?
3) Do any misunderstandings persist? (At this point, before answering the question, have each active participant read the other participant's instructions aloud to the class).

SCORING LEADERSHIP SKILLS

Subordinates depend on their superiors for guidance and support. Superiors depend upon their subordinates for performance and are, in turn, responsible for that performance [16]. Both depend on the organization for their livelihood and the quality of their work lives. Given this interdependence, scoring is as follows:

Students first score the actual performance. An "A" should be awarded to both the Director of the Systems Analysis Department and the Systems Analyst if (1) they agree on what constitutes "better" performance, (2) the Systems Analyst's performance would indeed be better, and (3) both parties are satisfied that their own best interests, as well as those of the organization, have been served. Since such a resolution is possible in this situation, anything less is unacceptable—an "F."

Next students should rate themselves on their own reactions. Their personal score should be as objective as possible. The score should be different from that given the active participants only if they personally would have handled the scenario differently as it unfolded. Accurate hindsight doesn't add points in this exercise, but may be very useful if recalled in the future.

THE EXERCISE IN PRACTICE

We have conducted this exercise on multiple occasions under two different conditions. Most often, we precede the exercise by a short lecture based on the ideas presented in the description of how a manager can overcome selective perception to function effectively in the newer leadership roles of mentor, counselor, and coach. We have also conducted the experiment "cold" without prior discussion. Different learning experiences are provided by the two approaches.

Without the students being admonished beforehand to listen, empathize, and engage in joint problem solving, the session can degenerate into a psychological keelhauling—or mutiny! Students may tend to fall back upon the older notions of managerial authority, supporting the Director entirely and viewing the Analyst as subordinate. Or, they may identify with the student participant who has the most forceful or most appealing personality. In this case, the learning comes from recognizing these tendencies in themselves, when the principles are identified after the scenario is enacted. Although such insights may be memorable, they probably are not worth the discomfort and embarrassment that can result from such a session.

Even when the exercise is preceded by lec-
perform worse—use this as a learning experience and as an opportunity to cultivate and more fully develop those skills which are inherent in these newer management roles.

APPENDIX A: INSTRUCTIONS - DIRECTOR OF SYSTEMS ANALYSIS DEPARTMENT

You are the Director of the Systems Analysis Department within the Information Systems Division of a large organization. It is your responsibility to resolve the interface between managers of other departments, who are the "customers" with computing needs, and the computing professionals who will provide the computing support. You have a staff of twelve analysts who are kept busy conducting functional needs studies, feasibility studies, economic analyses, and capacity planning. You've been in your position for eight years, and your job has changed considerably since you started. One of the most obvious changes is that it is now reasonable to support a great deal of end-user computing, since microcomputers and fourth-generation languages are so widely available.

With these rapid changes, it has been a challenge to keep the training level of your analysts adequately abreast of current technology. You were very pleased, two months ago, to hire a recent graduate who is not only well versed in microcomputer technology, but also very good at communicating. Your potential "star" analyst establishes rapport with the customers and helps them to enunciate their needs clearly, and has written some concise and comprehensive specifications.

Today, however, you're really displeased with your young protege. Thirty minutes ago, you heard in the cafeteria that the Human Resources Division has ordered a new microcomputer to automate the site's personnel inventory. This application is not just for office support, but involves new development as well as new hardware. Such a procurement without your department's input is a clear violation of existing policies. Two weeks ago you had assigned your new analyst to conduct the needs study for the personnel skills inventory application, and now the Human Resources people are moving ahead without you. You feel your sphere of responsibility is being invaded, and you don't even know what's going on. Now, in order to find out, you've asked the analyst to meet with you immediately after lunch.

You have the uncomfortable feeling that users are not being educated to appreciate the benefits of a unified approach to automating systems, although that topic was covered in a training session for all your analysts. End-user computing seems to be getting out of hand, with functional managers assuming responsibilities that should remain with the Information Systems Division. You fear that incompatible or redundant applications will appear in various parts of the organization, siphoning funds that should be controlled by your division and misusing the energies of professionals in other fields, who were hired to manage their own departments instead of engaging in computer systems development. Even if some of their systems turn out to be quite good, they won't have standard documentation, and so may not be very useable once the originator has moved on. Hardware configurations, too, need to be not just appropriate to the immediate task, but maintainable within existing arrangements that avoid expensive specialized agreements. Telecommunications should be provided as appropriate. If end-user applications aren't done well, they can cost enormous amounts of effort on the part of computing professionals to straighten out the problems, and the customers involved tend not to understand why changes to their procedures are necessary. Somehow the standards you've tried to adhere to seem to be breaking down, and you wonder what part your new analyst is playing in their dissolution.

You still feel fortunate to have found an analyst with important behavioral and technical skills that are hard to find in combination in any one individual. Yet, you can't have anyone, especially someone so good at influencing customers, who undercuts the mission of your division.

Your job is to use all of your leadership skill to influence this subordinate in the direction you think is appropriate, while you assume the roles of Coach, Counselor, and Mentor.

APPENDIX B: INSTRUCTIONS - SYSTEMS ANALYST

Two months ago, you were hired by a large organization as a systems analyst, specializing in end-user applications. You were selected for this position on the basis of your knowledge of microcomputers. After a week's orientation training, you were given a list of pending requests for assistance and told to deal with them as rapidly as possible, according to your own schedule. Many of the customers had literally been waiting for months to have their needs addressed. You made contacts as quickly as possible, and you were able to resolve some problems within a few days. Since you are confident of your own ability and sympathetic to the customers' needs, it was not surprising
that you very quickly became one of the most sought-after advisors in matters of microcomputer procurement and end-user applications. As a recent graduate who had been a good student, you were accustomed to receiving positive feedback to your ideas and opinions, and it has been gratifying to see a carryover of this reinforcement in your career. You like the sense of being needed and being able to help.

Determined to do an outstanding job, you’ve worked extra hours to make yourself available to the customers. You’ve set a goal for yourself of eliminating the backlog of requests within six months. If a customer had a requirement that seemed relatively simple, you have attempted to resolve the problem rapidly by providing some hardware selection advice and cost estimates, so that they can order. You’ve assured them that you’ll help them out with any minor problems that may arise while they are learning to use the equipment.

A couple of weeks ago, you were given a new assignment and told it was high priority. The assignment was to perform a full analysis for an automated personnel skills inventory. You were pleased to learn that your contact in Human Resources has a high level of computer literacy and feels comfortable, even eager, to attack the system design and implementation personally. Procurement funds had already been identified. It seemed the perfect environment to encourage end-user development. If the customer could do most of the actual design and implementation, it would help to ease the demands on the overburdened Information Systems Division. You felt sure that your boss, the Director of the Systems Analysis Department, approve of your resourcefulness.

Five minutes ago, the secretary told you that the boss had asked to see you as soon as you could get by the office. Something in her voice made you very nervous about the upcoming discussion. You sense a problem, but you don’t know what it could be. You haven’t totally ignored your paperwork, but you realize that you should have turned in additional reports on the resolution of some of the requested procurement. You’ve just been so busy that you couldn’t find time for report writing during the last couple of weeks, and so you had planned to draft some progress memos over the next weekend. You’re expecting a reprimand for being lax with your paperwork, but you hope the boss will understand that you’ve been very busy interviewing a number of customers. You also hope that you can offset the displeasure by describing your innovative solution to the personnel skills inventory problem.

REFERENCES


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