

MAZE BRIGHT TEACHERS IN THE CLASSROOM

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ABSTRACT

Last year's ABSEL conference included a panel discussion on building trust in the classroom (Butler, Crino, Howard, Markulis, Strang, & Malik, 2001). The panel members argued that success in teaching depends on teachers' abilities to earn the trust of their students, and they identified ten conditions of trust that teachers can pursue. This paper extends the panel's work by offering some concrete suggestions on how teachers can earn trust by developing sensitivity to some of the subtle behaviors occurring in the classroom. The approach to sensitivity offered here comprises eight aspects of "maze brightness." Maze bright teachers are aware of the informal and subtle cues, patterns, values, risks, influence processes, norms, and priorities that characterize their classroom dynamics. Consequently, they can build trust in the teacher-student relationship. This trust enables students to take risks in the classroom and to become involved in interactive exercises and simulations, which can facilitate effective learning. Examples of teachers' maze bright and maze dull behaviors are offered. Also included is a preliminary instrument with 28 semantic-differential items intended to measure maze brightness.

INTRODUCTION

The fundamental argument of this paper is that success in teaching depends in part on student-teacher trust, which in turn depends partly on the extent to which the teacher is sensitive to students' behaviors and beliefs. This article focuses on teachers' sensitivity, which is explored in a framework that defines the "maze brightness" of teachers. Maze bright teachers make decisions according to the informal and subtle cues, patterns, values, risks, influence processes, norms, and priorities that characterize their classrooms. Consequently, they tend to build trust, promote students' involvement and commitment, and enhance learning (Butler, et al, 2001).

The term, "maze bright" comes from behavioral psychology. A maze bright rat, as opposed to a maze dull one, quickly learns its way through mazes by learning how to find cheese and avoid shocks. Tryon (1940), while investigating the nature-nurture question, identified maze bright and maze dull rats. He separated the two groups and bred them, keeping the offspring separate. After seven

generations, the difference between the groups remained, in terms of their ability to learn mazes. Jennings (1971) extended the concept of maze brightness to managers in organizations. A maze bright manager quickly learns how to decipher the reward / punishment system of the informal organization, which is analogous to a maze.

The relevance of previous work on maze brightness to the current thesis is that some animals, even teachers, seem to be more perceptive than others. Although the causes of maze bright – maze dull differences are not addressed here, eight dimensions of human maze brightness are explored and applied to teaching situations.

HOW MAZE BRIGHT TEACHERS MANAGE THE CLASSROOM MAZE

The first of eight qualities of maze bright teachers is *pattern sense*. This is the ability to perceive patterns of situations (the forest) as opposed to perceiving isolated situations as separate, distinct, unrelated events (the trees). Teachers with pattern sense have the ability to perceive complex interrelationships among situations and the implications of those complexities (Butler, 2000). A teacher with pattern sense will test reality by looking at a given classroom situation in terms of what is happening with a number of students in that situation. Teachers without pattern sense tend to observe each student and each situation in isolation without regard to the others. They perceive every event as a separate issue without connections to other events. Thus, teachers without pattern sense are likely to make uninformed, impulsive decisions.

The second maze bright characteristic, *cue sense*, means that a person is sensitive to subtle communications and is able to understand them. Teachers with cue sense can understand implicit, indirect messages without explicit interpretation. They receive and process patterns of verbal cues as well as non-verbal cues of their students, such as face and eye movements, body positions, gestures, tones of voice. They can make sense out of the complex dynamics of a classroom without being told exactly what is going on. Those who lack cue sense say to their students, "Tell me exactly how I can motivate you and I'll do just that." "Tell me in words if you're bored, interested, scared, happy, angry." They need to see and hear explicitly in words, preferably in writing, exactly what they are supposed to do. Clearly, these limitations can strangle intelligent communication and thereby stifle effective teaching.

One of my colleagues shared an experience that exemplifies cue sense and pattern sense. Professor Burton (all names in these examples have been changed) was

Developments in Business Simulation and Experiential Learning, Volume 29, 2002

teaching human resources management with approximately 45 students in the section. There were four football players in the class and two ardent fans who clung to the players. All six sat near each other in the back two rows of the room. Every Thursday, Professor Burton dictated a one-question quiz on the *Wall-Street-Journal* Labor Letter of the previous Tuesday. A pattern emerged among the football players and the two fans. One week, they all gave the same wrong answer to the quiz. They said “airline pilots” had been on strike while the Labor Letter had discussed a nurses’ strike. There was nothing in that Labor Letter about airline pilots. The pattern became blatantly obvious when all six of these students earned a 40 on the midterm exam, which had 50 multiple-choice questions. The responses on all six answer-sheets were identical. Even the 30 wrong answers were exactly the same on all six answer-sheets. Not even the most maze dull teacher could miss this pattern of cues. However, a more maze bright teacher would have noticed the cues earlier and recognized the pattern in time to prevent the cheating before it occurred.

The third aspect of maze brightness is *value sense* – sensitivity to the stable, core beliefs (values) of others. Although bureaucratic rules and formalities can be important, human values are more important because, ultimately, they underlie those formalities. Teachers with value sense know what is important to their students. For example, they understand that most of their students have not yet developed the deep intellectual curiosity, so crucial to the teacher’s own value system. Teachers with value sense empathize with their students about the importance of grades, those tangible marks that will be recorded forever on transcripts. They realize that it’s more important that students learn relevant concepts than that they spend the exact number of required minutes in the classroom. They are aware that students’ values range widely and that this variety includes many interests other than one particular college course.

On September 11, our university president did not officially cancel classes. Despite the catastrophes that had occurred in New York, Washington, and Pennsylvania, students would not be excused if teachers wished to hold their classes. Some teachers canceled their classes anyhow. I did not cancel mine. My own values, hardened by two tours in Southeast Asia more than 30 years ago, dictated that, even if the president had ruled otherwise, I would have held classes. My reasoning was that, unless students had family or friends involved in the crashes, what could they do from 750 miles away? Focusing on task, and doing my job, would be the best therapy, for me at least. What I failed to recognize and appreciate were the values of my students.

The values of achievement, development, challenge, competence, perseverance, and responsibility were driving me. In contrast, the values of affiliation, compassion, fairness, involvement, morality, and security were driving most of my students. Their minds and hearts were with the victims and their families. They feared that we were at war and that they might be drafted. There were grumblings such as, “How does he expect us to concentrate? The country is

a war and here we are sitting in this classroom.” I ignored the grumblings. I did not connect my decision to hold classes with a lack of value sense until one of my students wrote in a term paper on maze brightness that “one of my professors” had done something “incredibly maze dull” by holding class that afternoon. It did not take me much time to figure out who that professor was.

The next aspect of maze brightness is *trust sense*, which refers to an understanding of the concept of trust and knowing who can be trusted under what circumstances. In this context, trust reflects teachers’ willingness to risk increasing their vulnerability when their students’ behavior is beyond their control. If one can control another’s behavior trust is moot, thus control can be a substitute for trust. When teachers mistrust their students, they tighten controls over the students (Zand, 1972). This is an unfortunate situation because control mechanisms can be cumbersome, time consuming, expensive, and humiliating. Moreover, control mechanisms tend to undermine trust. Thus, a self-perpetuating dysfunctional spiral tends to develop with diminishing trust, escalating control, and intensifying fear (Gibb, 1991).

Maze bright teachers understand that students’ benevolence and honesty (Larzelère and Huston, 1980) are only two of many conditions leading to trust. Eight other trust conditions include availability, competence, consistency, discretion, fairness, openness, promise fulfillment, and receptivity (Butler, 1991; Butler, et al, 2001). Thus, trust is much more complex than benevolence and honesty. When we as teachers trust our students, we feel confident that our students will not take advantage of freedoms that are essential to a healthy learning process (Gibb, 1972; Rogers, 1994). Trust allows us to risk increasing our vulnerability by reducing controls because trustworthy students are not only willing to avoid causing harm to us but are also willing and able to help us do our jobs (Gibb, 1991).

Professor Henderson told me a story that illustrates the importance of trust sense. He agreed to teach a double load to cover for a colleague on sabbatical. Consequently, he was inundated with a class of more than 100 students in his organizational behavior course. He assumed that, because of the anonymity accompanying the large class, many of his students would cheat on their tests. To prevent cheating, he made two or three different forms for every test. In addition, he employed his wife and two graduate students to help him proctor the tests. Later, I learned that the students felt oppressed and insulted. The climate did not seem conducive to learning (Gibb, 1972; Rogers, 1994). Instead, it turned the course into a win-lose game.

The next component is *face sense*. Our face is the image we believe that we project to others. Loss of face is embarrassment and humiliation, a feeling of public disgrace. Teachers with face sense are sensitive to their students. They can tell when a student’s Not OK Child is threatened (Harris, 1969). Teachers with face sense focus on ideas and avoid making personal *ad hominem* remarks. They focus their arguments on concepts and ideas, not on personalities. They are gentle with their students. Although their ideas

Developments in Business Simulation and Experiential Learning, Volume 29, 2002

may differ from those of their students, they do not make personal enemies of their students because of ideological differences. Most importantly, they carefully avoid embarrassing their students.

I've found that some students embarrass easily and for reasons I sometimes do not understand. Several years ago, I taught an undergraduate course in human resources management. The section had about 50 students and two of them, Jack and Monica, excelled far above the rest in class participation. One day, I complimented Jack and Monica publicly on their outstanding contributions to class discussions. My intention was to reward the two standouts and also motivate some of the other students to follow suit, but things did not work out that way. Immediately after that class, Jack and Monica came to my office and told me I had embarrassed them in class. I had not only caused them to lose face among their colleagues, who accused them of being grade grubbers and curve wreckers; but I had been insensitive to their values, violating value sense.

The sixth aspect of maze brightness, *priority sense*, refers to the use of time and other resources. Unlike value sense, which refers to understanding what is important to other people, priority sense involves focusing on what is important to our own effectiveness. Priority sense embodies Pareto's 80/20 principle: 20 percent of our activities account for 80 percent of our effectiveness. Teachers with priority sense develop their courses with emphasis on the important topics in their disciplines, they accentuate these important topics in their classes, and their tests emphasize these same topics. Thus, their priority sense reduces their students' stress by giving students clear guidance on what to study.

In addition to focusing on course content, priority sense relates to teaching processes, methods of facilitating learning. In this case, uncovering students' priorities means determining their preferred learning styles. The Chinese proverb, "I hear and I forget. I see and I remember. I do and I understand," oversimplifies the problem because students vary in their learning styles (Krause, 2000). However, we also know that visual and interactive methods are appropriate for many learning situations.

Failure to set priorities promotes confusion in a course, leaving students with no sense of what to study and a feeling that no planning has been done. This mistake often causes severe problems for teachers; and the more time they spend with their students, the greater the loss of their students' trust.

Another facet of priority sense relates to developing a career. As faculty members, setting priorities means weighing what will count when our department chairs and deans appraise our performance. From year to year the target can move among teaching, research, and service, and it often depends on what the members of the personnel committee are doing or have done. The faculty member with priority sense knows the *real* relative weights (as opposed to the published weights) of teaching, publication of books, publication in refereed journals, funded research, consulting, articles in professional or lay journals, service to the department, the college, the university, or professional

organizations, and so forth. However, since this aspect of priority sense does not address how teachers relate to their students, it will not be explored further here.

A detailed syllabus is an excellent tool for identifying and clarifying priorities for students. The syllabi for my undergraduate and graduate organizational behavior courses include course topics, methods, objectives, themes, and policies for absenteeism and grading. It also has a detailed schedule of topics to be covered each day of the semester. Students can determine the priorities of the course by noting the relative amounts of time scheduled for the various topics. In order to emphasize the importance of the priorities in the syllabus, a significant component of the first quiz addresses the contents of the syllabus. Further, I remind students that the number of exam questions for a given topic will be proportional to the amount of time scheduled for that topic.

The seventh dimension of maze brightness addresses the difference between the empty, bureaucratic concept of authority (position or legitimate power) and the more meaningful concept of real power. Teachers with *power sense* understand that, while authority depends on their position as faculty members, real power represents their ability to influence their students. They know that real influence comes from all five bases of power (French & Raven, 1959): coercive power ("learn this or you'll get a bad grade"), legitimate power ("learn this because I'm the teacher"), reward power ("learn this and you'll get a good grade"), expert power ("learn this because my extensive knowledge can help you"), and referent power ("learn this because you want to identify with my success and/or my charismatic personality").

Maze bright teachers (while not ignoring coercive, legitimate, and reward power) focus on expert and referent power. They work hard to convince their students of the extensiveness and relevance of their expertise, and to help their students identify with them as human beings. As a result, their students identify with the subject matter and maybe even internalize it. In contrast, maze dull teachers limit themselves to the first three bases of power. Consequently, they receive considerable resistance, compliance at best.

Dr. Paul Morgan, a highly charismatic and popular university president, provided an excellent example of the misunderstanding of power. Although this example does not relate to classroom behaviors, it illustrates perfectly how a lack of power sense temporarily derailed an illustrious career despite extreme maze brightness in all other dimensions.

Dr. Morgan successfully brought his institution through a series of wrenching, needed changes. Eight of the nine deans were replaced. Many new research-oriented faculty members were hired, and the contracts of many unproductive non-tenured faculty members were not renewed. Many teaching-oriented tenured faculty were retired or encouraged, with meager salary raises and other disincentives, to leave. The president's authority was not seriously challenged until he attempted to make some changes in the athletic department. He remarked, "A lot has

Developments in Business Simulation and Experiential Learning, Volume 29, 2002

been said about a power struggle between me and the director of athletics. I do not choose to view this as a power struggle. He is an employee in the athletic department and I am president of the university The recent alleged recruiting violations just accelerated looking at the organization chart. We do that all the time. That's part of management" (Foster, 1983, p. 1B).

What Dr. Morgan overlooked in this particular instance was the difference between position power, as defined by the organization chart, and the distribution of real power. The director of athletics had more constituents than the president did. Further, year after year, the athletic department had raised more money than any other component of the university. As a result of the battle, which was indeed a power struggle that bypassed the lines of formal authority, Dr. Morgan resigned. After that, so did the director of athletics.

The eighth and final characteristic of maze brightness is *propriety sense*. Propriety refers to the informal norms of a group or organization, and to the ethics of a profession. Often, we must use several of the other senses (cue sense, pattern sense, value sense, face sense) to determine what is proper. Propriety usually makes demands that exist within the bounds of both legality and morality, but are more restrictive than either legality or morality. For example, in most academic disciplines, submitting an article to more than one journal at a time is considered unethical and therefore improper (though few would argue that such behavior is immoral or illegal). In the classroom, propriety governs what kinds of jokes should be told, what language should be used, how assignments should be graded, what kinds of clothes should be worn, what types of questions should be asked, what feelings should be expressed, how the class should make decisions, what kinds of relationships should exist, how much participation should occur, how the performance of students and teacher should be appraised, and how processes should be monitored (Cohen, Fink, Gadon, & Willits, 2001; McGregor, 1960).

Teachers with propriety sense can quickly determine and help to establish the class norms, which can vary widely for different kinds of classes (for example: small vs. large, undergraduate vs. master's vs. doctoral, OB vs. HRM vs. strategy vs. POM, same-sex vs. mixed-sex). Most experiential teachers like norms that are conducive to joint inquiry, risk taking, openness, intrinsic motivation, collaboration, and the process of learning. If we have propriety sense, we do what we can to shape these norms early in the development of our courses.

My favorite example of an impropriety was a prank perpetrated by Whit Foster, a doctoral student with a teaching assistantship. During the first week of his principles-of-marketing course, he wheeled a large cake into the classroom and out jumped a nearly nude woman. It didn't take long for the department chairman, a former army colonel, to get word. Heard down the hall that afternoon: "Dammit, Foster! That was out of line! There were girls in that class. The dean's daughter was in there for Christ sake! Get in this office and shut the door behind you!"

PROCESS MODEL: EXPOSURE, MAZE BRIGHTNESS, TRUST, INVOLVEMENT, COMMITMENT, AND LEARNING

The effect of trust on learning has been well documented theoretically (Butler et al, 2001; Gibb, 1991; Mayer, Davis, & Schoorman, 1995) and empirically (Gibb, 1972; McAllister, 1995; Zand, 1972). The eight dimensions of maze brightness constitute a model of perceptiveness in terms relevant to earning trust. As a content model, it does not describe the process by which maze brightness contributes to earning trust. Therefore, what is needed is a process model showing cause-effect relationships among the relevant constructs. The rationales underlying an initial attempt at building such a model are described here.

Maze-bright teachers earn their students' trust because they can function in a complex, changing world without having to be told exactly how (cue sense). Maze-bright teachers also understand the conditions of trust – whom they can trust and when they can feel safe in risking increased vulnerability (trust sense). Maze bright teachers can argue with others without turning the discussion into a series of personal insults (face sense). They also understand the real values, priorities, power bases, and proprieties of their students. In contrast, maze-dull teachers tend to create mistrust because, as they interact with their students, they focus on the mechanistic aspects of their classrooms and ignore the interpersonal. In the presence of maze-dull teachers, students are unwilling to risk increasing their vulnerabilities because they fear damaging consequences from one or more of the eight aspects of maze dullness. Therefore, with maze-dull teachers, students tend to refrain from openly and actively participating in learning processes such as classroom discussions, simulations, and exercises.

Finally, active involvement in learning processes has been found to promote learning (Arthur, 1980; Comer & Nicholls, 1997; Schreier, 1989). A theoretical link from involvement to learning is suggested by normative decision theory, which contends that participative leadership styles should be used when commitment of followers is important (Vroom & Jago, 1988). That is, followers' involvement in decisions tends to promote their commitment to those decisions. Commitment is defined in terms of three components: desire to maintain membership, willingness to exert effort, and acceptance of values and goals (Mowday, Porter, & Steers, 1982). Students who are committed to a college course will attend classes, exert effort studying the material, and believe in the values and goals of the course – behaviors that clearly lead to learning. This analysis suggests that the effect of involvement on learning is indirect, mediated by commitment: involvement leads to commitment which leads to learning.

The foregoing arguments suggest the following propositions.

Proposition 1. Teachers' exposure to their students has an inconsistent effect on the students' trust in their teachers. (If a teacher is maze bright, as the number of interactions between teacher and students increases, students

Developments in Business Simulation and Experiential Learning, Volume 29, 2002

increasingly believe that the teacher will perceive relevant patterns (pattern sense), hear them correctly (cue sense), empathize with their values (value sense), understand trust (trust sense), avoid causing them to lose face (face sense), identify and respect priorities (priority sense), comprehend power (power sense) and do what is proper (propriety sense). Thus, students of a maze bright teacher would be willing to risk increasing their vulnerability to the teacher and their trust would increase as the teacher's exposure increases. In contrast, if the teacher is maze dull, students' trust would decrease with increasing teacher's exposure. This reasoning leads to Proposition 2.)

Proposition 2. Teachers' maze brightness moderates the effect of teachers' exposure to their students on the students' trust in their teachers.

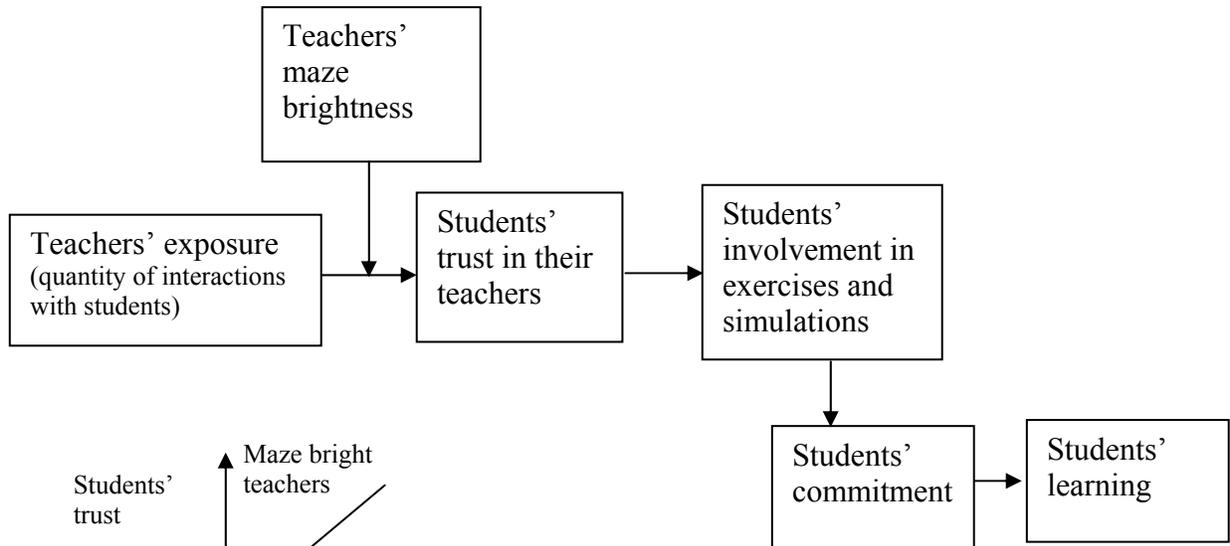
Proposition 3. Students' trust in their teachers has a positive effect on students' involvement in discussions, exercises, and simulations. (Students' involvement requires risky behavior and trust is defined as the willingness to risk increasing one's vulnerability to another whose behavior is beyond one's control.)

Proposition 4. Students' involvement has a positive effect on their commitment. (Active involvement promotes commitment.)

Proposition 5. Students' commitment has a positive effect on their learning. (Attending classes, studying the material, and believing in values and goals of the course promote learning.)

Figure 1 shows a process model portraying these relationships among exposure, trust, maze brightness, involvement, commitment, and learning.

Figure 1.
Effects of exposure, maze brightness, trust, and involvement on learning.



Graph of the moderated relationship

MEASURING MAZE BRIGHTNESS

The next step in testing the process model in Figure 1 is to measure the constructs. There are validated instruments for all of these constructs except maze brightness. The questionnaire in the Appendix is an initial attempt to measure the eight maze-brightness characteristics. The construct validity of this instrument is currently being assessed. Correlations with scales measuring self-monitoring and the intuiting-sensing and thinking-feeling dimensions of the Myers-Briggs Type Indicator (have been computed to assess convergent and discriminant validity. These correlations are encouraging, though not extremely impressive.

REFERENCES

- Arthur, R. D., Jr. (1980). Experiential learning enters the eighties. *Developments in Business Simulation and Experiential Exercises*, 7, (Bernie Keys Library CD), 151-152.
- Butler, J. K., Jr. (1991). Toward understanding and measuring conditions of trust: Evolution of a conditions of trust inventory. *Journal of Management*, 17, 643-663.
- Butler, J. K., Jr. (2000). Of mice and managers: Shocks and cheese in the organization maze. *Organization Development Journal*, 18(3), 25-36.
- Butler, J. K., Jr., Crino, M. D., Howard, B., Markulis, P., Strang, D., & Malik, D. (2001). Panel discussion on building and maintaining trust in the ABSELesque classroom. *Developments in Business Simulation and Experiential Learning* 28, (Bernie Keys Library CD), 19-22.
- Cohen, A. R., Fink, S. L., Gadon, H., & Willits, R. D. (2001). *Effective behavior in organizations*. (7th ed.) Boston: McGraw-Hill Irwin.
- Comer, L. B., & Nicholls, J. A. F. (1997). Does involvement influence learning from simulation participation? Some relationships with helpfulness and performance outcomes. *Developments in Business Simulation and Experiential Learning* 24, (Bernie Keys Library CD), 111.
- French, J. R. P., & Raven, B. (1959). The bases of social power. In *Studies in social power*. In D. Cartwright (Ed.), (pp. 150-167). Ann Arbor, MI: University of Michigan Institute for Social Research.
- Foster, D. (1983, January 16). Morgan tries to restore calm surface to State University. *Greenville News/Piedmont*, p. 1B. (Names have been changed.)
- Gibb, J. R. (1972). Trust and role freedom: A TORI innovation in educational community. *Journal of Research and Development in Education*, 6, 76-85.
- Gibb, J. R. (1991). *Trust: A new vision of human relationships for business, education, family, and personal living*. North Hollywood, CA: Newcastle.
- Harris, T. A. (1969). *I'm OK, you're OK: A practical guide to transactional analysis*. New York: Harper & Row.
- Jennings, E. E. (1971). *Routes to the executive suite*. New York: McGraw-Hill.
- Krause, L. B. (2000). How we learn and why we don't: The cognitive profile model a workshop in teaching to reach your students. *Developments in Business Simulation and Experiential Learning*, 27, (Bernie Keys Library CD), 179-181.
- Larzelère, R. E., & Huston, T. L. (1980). The dyadic trust scale: Toward understanding interpersonal trust in close relationships. *Journal of Marriage and the Family*, 42, 595-604.
- Mayer, R. C., Davis, J. H., & Schoorman, F. D. (1995). An integrative model of organizational trust. *Academy of Management Review*, 20, 709-734.
- McAllister, D. J. (1995). Affect- and cognition-based trust as foundations for interpersonal cooperation in organizations. *Academy of Management Journal*, 38, 24-59.
- McGregor, D. (1960). *The human side of enterprise*. New York: McGraw-Hill.
- Mowday, R. T., Porter, L. W., & Steers, R. M. (1982). *Employee-organization linkages*. New York: Academic Press.
- Myers, I. B., & Briggs, K. C. (1962). *Myers-Briggs type indicator*. Princeton: Educational Testing Service.
- Rogers, C. (1994). *Freedom to learn*. New York: Merril.
- Schreier, J. W. (1989). Lifelong learning and ABSEL: An inquiry definition and relationships. *Developments in Business Simulation and Experiential Learning*, 16, (Bernie Keys Library CD), 196-197.
- Tryon, R.C. (1940). Genetic differences in maze learning in rats. *Yearbook of the National Society for the Study of Education*, 39, 111-119.
- Vroom, V. H., & Jago, A. G. (1988). *The new leadership: Managing participation in organizations*. Englewood Cliffs, NJ: Prentice-Hall.
- Zand, D. E. (1972). Trust and managerial problem solving. *Administrative Science Quarterly*, 17, 229-239.

