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The Effect of the Environment on Office Worker Productivity and Creativity

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**THE EFFECT OF THE ENVIRONMENT
ON OFFICE WORKER
PRODUCTIVITY AND CREATIVITY**

Karen D. Clark, B.M.E.

An Abstract Presented to the Faculty of the Graduate
School of Lindenwood University in Partial
Fulfillment of the Requirements for the
Degree of Master of Arts in Communications

2000

ABSTRACT

This paper will explore the effect of the physical and human environment on office worker creativity and productivity.

The study will begin with a discussion of creativity, addressing questions such as: Why do we want creative employees? What value do they bring to an organization? Can the elements that enhance creativity in office workers also enhance productivity? How is creativity enhanced? Why is it that many organizations successfully stifle creativity, thus hampering employee morale and productivity?

Research has shown that the physical environment affects workers' ability to think and function effectively. There is a basic need for aesthetics as a basis for creativity, and a need for order, dissonance, and balance. Color, lighting and music are just a few elements that make up the entire package.

Brain research will be examined, including topics such as right-brain vs. left-brain, creative thinking and analytical thinking, as well as the effect of emotions and stress upon learning and upon the thinking process.

This paper will then focus on how corporations can benefit from creative employees and will explore methods of enhancing creativity as well as providing examples of the many ways in which organizations stifle it. The hypothesis is that the bottom line will ultimately improve in those companies that choose to foster

creativity.

In the final two chapters the author creates an example of an optimum physical and human office environment designed, in this case, for an insurance claims office, but the principles will be applicable to most offices which have a combination of clerical and professional workers, as well as both inside and field representatives.

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Degree of Master of Arts in Communications

2000

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Chapter I

INTRODUCTION

As we enter the twenty-first century, we are at the dawn of a new era with an opportunity to learn from our past mistakes and take advantage of thousands of new technologies to enhance our lives. In reviewing the past century, we can see that we've made great strides. For example:

- We have taken fifteen hours off of the average work week. In 1909, the average hours on the job per week was fifty. Today, according to the Bureau of Labor Statistics, the typical workweek is thirty-five hours.¹
- We established a minimum wage. In 1938, the Fair Labor Standards Act established a minimum working wage of twenty-five cents an hour. The minimum wage is currently \$5.15.
- We established an organization to make our workplace safer. Business related fatalities have dropped from a rate of 38 out of 100,000 workers to 4 in 100,000.
- The Social Security Act of 1935 has provided a financial cushion for retirement.

¹ Although this figure is questionable and will be explored further by this writer.

- ERISA, established in 1974, gave some protection to employee benefit plans, although in recent years many employers have found ways to avoid paying health insurance to its retirees.
- Private pension plans have increased.
- Anti-discrimination laws have improved job access for many, although women and blacks still earn three-fourths of what white males earn.
- Technological innovations have increased productivity on the job and made home lives easier.
- We have seen flexible benefits plans, 401(k) plans, stock ownership programs and stock bonus plans, as well as flex time, telecommuting, job sharing and compressed work weeks. (Stafford)

However, despite these improvements, workers seem to be experiencing more stress than ever. Massive layoffs and downsizing in the 1980's took its toll on American workers, teaching them that they were no longer valued by the companies to whom they had dedicated most of their working lives. As a result, employees are more willing to look for a new job when things aren't going well rather than trying to improve their current job.

And despite today's tight labor market, employees are paying larger portions of their health care costs with higher premiums, higher deductibles and less access to quality medical care as corporations continue to try to cut costs to compete in a tough competitive environment. This creates a dilemma: how to

retain quality workers and enhance their productivity to create a profitable bottom line.

In order to resolve this dilemma, one must consider why people spend thousands of dollars and travel hundreds of miles to visit national parks, oceans and mountains? Sometimes it's for the sport, but often it's just for the visual beauty. Yellowstone Park, The Grand Canyon, tropical islands, the majestic, haunting beauty of Alaska -- all exotic destinations requiring some financial sacrifice to enjoy.

Humans have a need for beauty. The ocean view room always costs more than the parking lot view. Museums draw people of all types. City dwellers are drawn to the country or to city parks to enjoy the sights and sounds of nature.

Much of who we are as individuals is molded by our environment -- our physical environment, as well as the emotional. An individual surrounded by beauty and nature in a relaxed atmosphere will respond and perform differently than one in an unhealthy, stressful, and unattractive setting.

People of strength and determination can overcome a difficult environment and are often stronger because of it. However, in an office setting, most will succumb to an unhealthy workplace and will perform at a lower level as a result.

Consider a common scenario: a plain-looking office building in a congested area, with employees crammed into tiny cubicles or pushed together desk-against-desk. The bosses have offices with windows, while everyone else lives under the yellow fluorescent lighting, oblivious to the outdoors. A few

tattered posters line the walls, and employee notices are posted on bulletin boards. A bleak, windowless break room hums with the sound of the refrigerator and vending machines. Rest rooms appear to have been decorated in the 1960's, with sickeningly sweet deodorizers pouring out odors that smell like cherry cough syrup. Conference rooms are small and bleak -- once again windowless -- with the exception of those for upper level executives, which are plush and overlook panoramic vistas. The heat is often too hot in the winter and the air conditioning too cold in the summer. The discomfort takes its toll on the emotional landscape, and managers make certain that no one goes without reprimand when their employees are one minute late, but don't notice when that employee works an extra hour or two. People are constantly watching the clocks as well as their backs, so they don't get "stabbed" by a co-worker. However, long hours are the norm if you don't want to lose your job. And don't make waves! Just do your job and mind your own business.

Visualize now a beautifully constructed office building surrounded by a variety of trees, fountains, grasses and ponds with picnic tables and benches. Seasonal flowers line pathways and employees gather in conversational groupings throughout. A jogging trail winds through the grounds. Artwork and sculpture abounds, and professional decorating touches are apparent, with various color themes in different areas, depending upon the mood desired for that area. There is a quiet room where employees can go to relax or read, with soothing music and trickling water and botanicals. There are conference rooms, but they are appointed

with comfortable seating in conversational settings, with interesting artwork and sculpture. Nature is brought indoors through artwork and plantings. Each employee has an ergonomically designed workstation with plenty of natural lighting. The atmosphere is friendly, and it encourages socializing and networking. A fitness center with large windows overlooks a beautifully landscaped courtyard. Changing rooms are adequate so that employees have the opportunity to come in early to work out or use their lunch hour. A healthy snack bar provides heart-healthy fare for those who desire to partake. Even the rest rooms take employee comfort into consideration, with full doors for privacy and piped in music. Employee health is considered with “no touch” faucets and staggered open doorways so handles don’t have to be used.

In this ideal environment, employee attendance is improved, productivity is increased, and creativity is enhanced. As a result of the company’s investment, profitability increases and the company gains a reputation as an employer who cares. Turnover becomes negligible, and there is a long waiting list of quality people wanting to work there.

The above examples are extreme, but make good reference points for discussion about how the environment can affect one’s creativity and productivity. But first, let’s examine why the environment has such an effect.

Developing an aesthetic sense can **open up the mind**. If nature is soothing to the senses, and a relaxed open mind results in creativity, doesn’t it make sense that bringing nature and art into the workplace will improve creativity?

We are constantly bombarded with physical and visual forces which have a profound impact on us. We feel weightless when swimming, or we feel the pull of gravity when lifting a heavy object. However, we can also sense these physical forces just by looking around us: the invisible wind becomes visible when it picks up objects and carries them. Gravity pulls on a boulder causing it to crash to the ground. A work of art can convey these impressions and make us feel emotions, just as music can effect our mood, our health, and even our learning ability. However, while the physical forces are easily measured, visual and auditory forces are not.

According to Benjamin Martinez and Jacqueline Block, "Visual forces are those things felt in, or by the eye alone. We might say that an object is heavy looking or that a picture is full of movement, but a scale can't weigh that kind of heaviness" (Martinez 2). Likewise, music, which has been shown to affect blood pressure and heart rate, can be difficult to measure. However, studies such as one at Louisiana State University found that listening to hard rock music increased the heart rate and lowered the quality of workouts in a group of adults, while easy listening music allowed for longer training sessions (Campbell 67).

Fulfilling the human desire for aesthetics can help employees reach their maximum potential creative capabilities. The benefit to the company is employees who are better at problem solving and invention.

For example, as an exercise in sharpening perception, George Opdyke, in his book Art and Nature Appreciation suggests trying to see how many kinds of

green one can find in various trees, shrubs and plants. He says that it is surprising to see what kind of an eye for green will be attained in just a few hours (67). Or, Opdyke suggests, studying light and shadows, line and form. Or studying reflections in water: "often the reflection of an object is very different from the view of the object itself -- so different as to be puzzling" (90). Or, one could observe reflections and shadows on the pavement of a crowded street on a rainy day, or the reflections of the light at night. And,

There is perhaps no more delightful sight out of doors than a drenched landscape flooded with sunlight after a thunderstorm. The reflection of the brightening sky on the myriad surfaces of every wet thing is a joy to the eye, especially in contrast to the dark, retreating form of the thundercloud. The sky is bluer than before the rain, colors everywhere are clearer, rocks glow like agates, and leaves gleam like silver and gold . . . Renewed, refreshed, her face washed clean, Nature is at her best -- never more animated and radiantly beautiful. (94)

The famed impressionist artist Claude Monet built a studio where he could keep several canvasses going at one time. As the wind played with the reflections on the water, he would move from one canvas to the next, trying to capture each moment.

In Hawaii, sunsets are sacred. Tourists flock to the beaches to observe the reflections of sky and sea as the sun drops into the ocean. Each sunset is unique; the water and clouds refract light in different ways, making each one a work of art.

These changing images can help to clear the mind and help us see things from a new perspective. What appeared to be a still life suddenly, with a puff of

wind, becomes an impressionistic, moving picture. Solutions to problems that we have placed in the back of our mind may suddenly appear in these moments of quiet reflection, which, the corporate mindset would consider “useless daydreaming.”

Corporations throughout the United States have undergone major changes in the last decade of the twentieth century, with tremendous physical and psychological impact upon employees. Mergers have resulted in downsizing and managers are re-evaluating productivity. Workers are feeling more stress than ever, trying to balance family and personal needs with the demands in the workplace. Cubicle corporate conditions are taking their toll on those who are the backbone of the businesses, and customer service is suffering in the process. CEO's seem to be oblivious to the needs of their workers, which creates dissension in the workplace, destroying the very thing that companies should be focusing on: the creativity of their people.

Increased productivity can only last so long. Requiring fewer people to produce greater quantities of work leaves no room for improving upon products and services. The final results won't be in for another decade or so, but those companies who want to be successful in the future need to start taking action now. According to Donald Blohowiak, in his text Mavericks! How to Lead Your Staff to Think like Einstein, Create like da Vinci, and Invent like Edison,

computers . . . fail to improve productivity at the point at which human ingenuity and judgment must bear on the enterprise . . . The most advanced computers . . . can't

invent new products, can't generate innovative competition strategies, can't make customers feel welcome or served.(4)

Corporations would be wise to take note of the widespread dissatisfaction with automated phone systems. The telephone is the "gateway" to customers, and is often the only contact a potential customer will have with a company. Requiring them to waste their valuable time listening to a lengthy "menu" is inconsiderate, and lets them know that the company does not value them as a customer. If given a choice between a business with an automated system or one with a friendly voice, most people will choose the latter, even if it means having to spend a little more for the product or service.

Stifling creativity destroys innovation and productivity, and has a detrimental effect on customer service. As we enter the twenty-first century, I believe that corporations will find it necessary to place an emphasis on service. Employees who are bound and gagged by rigid, hierarchical organizations will be unable to provide the service necessary to compete. The organizations that will be successful will learn how to nurture their people. They understand that "the most important corporate asset weighs but three pounds and is invisible to the unaided eye. It's the brain in every employee's head" (Blohowiak 6). The author goes on to say:

Businesses pressured by world-class competitors to innovate more in less time are also squeezed by demands for greater productivity and profits on slimmer margins. They've turned to sophisticated machines to improve their

operations. But the glow is off the computer screen as rescuer of the bottom line. The New York Times reports, 'Though corporations continue to spend billions of dollars on technology, white-collar productivity has stagnated.' Throwing computers at office staffs no longer results in greater efficiency. (4)

I can often tell how a business treats their employees as soon as I enter the establishment. The evidence is in the way the employees treat the customers. A company that is playing the bottom-line game will have employees who lack compassion for the customers, because they know that if they spend too much time with the customer, they will have to put in extra and often uncompensated hours at day's end to meet their work quota. The more compassionate employer will allow their employees to spend the extra time and provide the extra "and then some" service, which in the long run will result in higher customer retention and sales. This environment also provides "ponder time" for its workers, which results in innovation and improved productivity.

Companies must reward their people for extra effort. Even those workers that have limited customer contact feel the stress and burnout associated with higher quotas, resulting in poorer performance and causing them to focus only on getting the job done and not improving it.

Thousands of companies have thrived in the past under beaurocratic, hierarchical formulas. So why do corporations need to be creative?

Let's first examine the old way: In an article in the St. Louis Post-Dispatch, Christopher Carey quotes Don Wainright, Chairman of Wainright

Industries in St. Peters, Missouri: “In most organizations, the managers operate like parents who make the rules, and then administer punishments and rewards” (quoted in Carey). For example, employees at the customer service level have several levels of management between them and the top of the ladder. Employees are expected to competently carry out specific duties within a very structured system, with very little information provided for them about the reasons for the rules and procedures. So what happens when a customer makes a special request or has a special need? The harried employee who is already overworked does not have time to obtain the answer or take care of the request. Even if time was available, the employee may not know how to go about meeting the customer’s need due to lack of training. And there is no reward system in place to provide incentive for the employee to do so. Questions to supervisors may actually be discouraged since the employee fears that he may appear incompetent, which would be reflected in his next salary review. So the customer may not be satisfied with the company and its lack of service.

On the other hand, an empowered employee is informed and is given the freedom to be creative to assist customers in reaching solutions. An organization that nurtures creativity will have employees who are not afraid of taking risks, and, in so doing stand a much better chance of satisfying and delighting the customer with innovative solutions.

Moreover, the employee in a creative, flexible and nurturing environment is more likely to remain as a loyal employee. Considerable resources are invested in

the recruitment, training and retention of talented people. And it takes creativity to keep employees who are investing their time, energy and intelligence in the organization.

Improving creativity in a company is the first step in improving productivity. But how do we do this? Does productivity increase in a creative organization? And, if so, in what ways can we improve the office worker's environment to foster creativity?

In order to answer these questions, we need to discuss the effect of the environment upon the senses, including a discussion of basic needs as well as the need for order, dissonance, balance, and aesthetics as a basis for creativity. An examination of brain research and creative and analytical thinking will follow, along with review of the effect of emotions and stress upon learning and upon the thinking process. The impact of the physical environment upon the ability to learn, think and create will be included, as well as the creative process itself and how corporations can benefit from creative employees.

The increased productivity that results should improve the bottom line for most corporations, but there will be a period of investment before positive results are seen. This will require patience on the part of the organization's leaders, and a dedication to a vision. Values will have to be examined and a corporate culture developed that will provide the proper environment for optimum performance.

At the conclusion of these discussions, I will design a model office environment. I will use an insurance claims office, but the principles will be

applicable to most offices which have a combination of clerical and professional workers, as well as both inside and field representatives.

Chapter II

LITERATURE REVIEW

There is a wealth of recent literature on creativity and productivity, but most of it consists of exercises to improve creativity, with very little time devoted to the impact of the environment on employees. I have obtained much of my information from newspaper articles as well as recent literature. In this era of employee dissatisfaction, even television commercials are addressing the issue, with children sarcastically stating their lofty career goals, such as “I want to claw my way to the top.” Internet providers are encouraging people to find better jobs, and people are doing it.

Why are employees not satisfied? We’ve seen the improvements to the workplace in the past century as indicated in Chapter I. With all of these “improvements,” why are people unhappy? Why are there so many articles centered on employee recruitment and retention?

For one thing, it isn’t as it seems. People are tired of being abused by their employers. For example, in the statistic quoted earlier on the thirty-five hour work week: most “exempt” employees’ hours are not tracked (“exempt” referring to those who don’t fill out a time card.) Individuals are working overtime, but no one is keeping track because they do not receive any extra compensation, and employers are getting away with it. They have trimmed staff to cut budgets and

are requiring their exempt personnel to pick up the slack, resulting in burn-out and disloyalty.

Moreover, we keep hearing that unemployment is at an all-time low. However, many employees have been forced out of their jobs into part-time or temporary jobs with little or no benefits. And retirees are no longer guaranteed health insurance. For example, McDonnell Douglas Corporation, which recently merged with Boeing, has cut off retiree health insurance, forcing those who were not in a union to spend their entire pension just paying for medical insurance. These are people who devoted their entire working lives to the company and were even promised in writing that they would never lose their health benefits. As a result, a group of employees has formed and the Wall Street Journal has taken notice of their efforts, while the west coast engineers and professional workers, have formed a union and are currently in labor negotiations. If all were as well as the statistics would lead us to believe, there would be no need for labor unions to be forming amongst professional employees.

And ERISA, originally established in 1974, has simply made it more difficult for employees to get fair treatment on health insurance claims. Self-funded programs do not have to comply with state insurance regulatory agencies, and it is difficult to prevail in litigation.

However, the attitude seems to be changing in some areas due to the tight labor market. Literature on enhancing creativity abounds along with self-help books on how to become more creative and more productive.

Aesthetics

The need for aesthetics is apparent. The visual and auditory environment can soothe and calm, or can excite and motivate.

For example, empty space can be appealing to the eye and ear. It draws you in and creates tension. It can command your attention more effectively than the loud, obnoxious clutter that we are forced to tolerate in this high-tech society.

Roy Rivenburg's article entitled "Sound of Silence: It's Disquieting," in the July 28, 1997 issue of the St. Louis Post-Dispatch asks "Are we addicted to noise?" Think about it. When was the last time you experienced silence?

Yesterday? Last week? Last year? How do you think you would respond to it?

You may not respond favorably at first. [Unless, of course you seek solitude and quiet on a regular basis.] Most of us have become so immune to the subtleties surrounding us that we have become desensitized.

The article tells of a New York composer, Raphael Mostel, who discovered while miles away from any environmental noises that he was unable to hear birds. His friend kept telling him about various nature sounds, but his ears were unable to detect them because he had become immune from the bombardment of noise back home. (Rivenburg).

We awaken to an alarm clock, brush our teeth listening to television or radio commercials, talk shows, weather reports. We turn on hairdryers and microwave ovens, dash out the door and start up the car motor, radio blasting from yesterday's setting. At work we are attacked by the sounds of copiers, telephones,

fax machines, computers humming and voices buzzing. Elevators have Muzak and grocery stores have “fuzak.” We even put on headphones while exercising outdoors, drowning out all of the relaxing sounds of nature.

Empty space: easy on the eye. The open sky, green space -- a universal need.

Elimination of clutter -- be it auditory or visual -- helps us to focus. It satisfies the principles of economy in the use of elements, as well as simplicity.

The uneducated, inartistic eye may see empty space as boring. Yet, when used effectively, it can draw the eye into a scene before one realizes what is happening. For example, in the late nineties, Hallmark placed an ad on the back of a magazine cover. Most of the ad was white space. The Hallmark logo was placed on the page, making it appear to be the back of a Hallmark greeting card. The only text was at the bottom: “Finding this on the back definitely has its rewards.” Powerful, yet simple. We recognize the brand so we don’t need details. Imagine what clutter would do to this ad.

If use of empty space is effective visually, what about aurally? Anyone who listens to music knows that there are pauses, breaks and rests. This creates tension. We want to know what comes next and when it will arrive. According to the aforementioned Post-Dispatch article, Beethoven inserted forty crucial pauses in the opening minutes of the Fifth Symphony. In fact, it’s the empty space between notes that creates rhythm. Without pauses, there would just be one long noise, like a siren.

In speaking, if I . . . pause . . . in my speech, it creates empty space that needs to be filled. Tension is created. Have you ever noticed how difficult silence can be? Try not responding to a question some time.

Some of the most appealing ads are those with a lot of open, empty space. An ad for Allstate Insurance shows a vast, azure ocean with a single boat floating out in the open and a storm approaching on the horizon. The ocean covers two pages, and has arrows pointing outward with the text, "5 trillion square feet." The boat has arrows pointing inward with the text, "19 feet." At the bottom of the page is the Allstate logo and a small amount of text with the headline, "When was the last time you checked your boatowners policy?"

The ad's effectiveness is compounded by its simplicity and lack of clutter. Keep it simple and you will attract more viewers and listeners.

Scenario: the television is blaring in the background. You go into the kitchen to get a snack when suddenly you notice something is missing. you peer around the corner into the family room to see if the TV is broken. You notice a nearly blank screen. "Who put the set on 'mute'?" you ask. Then you see it. A visual ad with no sound. Curious, you go into the room to watch. Gotcha!!

Some theories say that our brain craves auditory stimulation. Are we addicted to it? Rivenburg says that composer Mostel believes that the media's use of noise is bombarding us and destroying our creativity. And he quotes Los Angeles psychologist and attorney Rex Julian Beaber as saying, "Consciousness abhors a vacuum" (quoted in Rivenburg). Rivenburg then states that Beaber

believes that “the mind’s hunger for information is like the body’s drive for food -- and that both have become twisted by technology.” Yet, he again quotes Baeber that, “If you’re filling your mind with anything directed and produced by another, you can’t be creative or contemplative . . . Human consciousness is at its most divine point not in the here-and-now, but in the when-and-if” (quoted in Rivenburg). This explains why creative persons often need to retreat -- to be alone and introspective.

We become creative in our attempts to fill the empty space. Too much clutter hampers creativity, leaving no room for our imagination.

Imagination . . . the key to creativity. George Howard Opdyke in 1936 wrote that developing an aesthetic sense can open up the mind. Current literature on creativity speaks of opening up the mind. According to Collin Rose and Malcolm J. Nicholl in Accelerated Learning for the 21st Century, historically we can see that creative geniuses used this technique regularly:

- When asked where he found his melodies, J. S. Bach replied, “The problem is not finding them, it’s -- when getting up in the morning and getting out of bed -- not stepping on them.”
- Beethoven said his ideas came to him “in the silence of the night or in the early morning, stirred into being by moods.”
- Albert Einstein allowed himself to daydream, unrestrained by conventional inhibitions, allowing his imagination to float freely.

- Jonas Salk said “It is always with excitement that I wake up in the morning wondering what my intuition will toss up to me, like gifts from the sea.” (Rose 224-226)

The mind is free of clutter in the morning. This is the time when most creative geniuses made their discoveries.

I had an interesting experience several years ago when I was taking a class in jazz improvisation at a local university. There is a phenomenon known as “perfect pitch.” This occurs when an individual has the ability to sing a note before hearing it on an instrument. For example, you could tell the person to sing a “C” or an “F” and he or she would be able to do so, without hearing the tone first. During the time that I was taking this class, I would get up early in the morning to practice my improvisation on the piano. I would hear a note in my head, then strike the note on the piano, and it would be correct. Please note that I do NOT have perfect pitch. But I was able to do this every morning. Later in the day, I couldn’t even come close. But in the morning, when my mind was clear and free of clutter, I was able to hear the note in my head and it was on pitch.

In the best-selling book The Artist’s Way at Work, the authors encourage those who wish to enhance their creativity to awaken early and write “morning pages.” Once again, we see that the morning time is the time of creativity. No clutter, no distractions. Write down your thoughts, your dreams, your plans and ideas. See how this will improve your life.

What does this have to do with work environment? If we create an atmosphere of acceptance, free of distractions, employees will be more likely to be creative. This refers to the human as well as physical environment. Close supervision of irrelevant details and busy work should be eliminated as much as possible. Workers should be given opportunities to get away to a workplace free of clutter and criticism in order to come up with innovative ideas.

What about other environmental factors, such as color? Does it matter what colors we surround ourselves with?

Color is relative -- it depends upon its surroundings. There is no such thing as color in a void -- a single, isolated color. Colors are always seen in relationship to other colors. Even on a canvas, the first brushstroke of color is affected by its relationship with the canvas. Hues, values, intensities and temperatures are all affected by color interaction.

Despite these complex relationships, studies have shown that there are certain color preferences based upon gender. Other studies have shown evidence of the stimulating effect of warmer colors (reds, oranges, yellows.) Factories attempt to get more work out of employees by bathing work areas in colored light. Grocery stores use colored lights to make food look more appetizing. Restaurants use soft, warm lighting to create a cozy, comfortable environment and enhance the appetite.

In one study of color and intensity, three responses were measured: tapping activity of the subject, memory activities, and mental work (math.) Math

activities were strongly improved with more intense colors. Tapping movement was more uniform with green, slower with blue, and decidedly quicker with red.

Other studies have demonstrated the exciting influence of red, orange and yellow on performance, and the tranquilizing effect of green and blue.

Designers of workplace environments can draw upon color studies to create emotional responses in their target groups. However, they must keep in mind that different cultures respond in different ways to colors. For examples, white is associated with purity and red with anger or passion in Western cultures. However, in some parts of Asia, white is the traditional color of mourning, worn at funerals. Green, often associated with growth and renewal, is also the symbolic color of envy. In traditional sixteenth-century European painting, blue would often be used as the color of the Virgin's robe. Blue was universally understood to symbolize serenity and virtue. In the early part of the twentieth century, Picasso went through his "Blue Period," using the color blue to evoke sadness and coldness (Martinez 174). And today, we call the sad songs of various musicians "the blues."

Despite these associations, and whether they are learned or inherent, color has "... a surprising autonomy in its tendency to astonish, misbehave, and delight in unexpected ways that, finally, expand our vision and imagination" (Martinez 175).

Designers should consider the type of work being performed in an area and use colors accordingly. An area used for creative contemplation may have cool

greens and blues, while an area for brainstorming could be alive with reds and oranges. The use of the rhythms and patterns of art and music can also have an effect on creative thinking.

For example, in his book The Mozart Effect, Don Campbell discusses the many ways in which music effects us. He quotes George Gershwin: "Music sets up a certain vibration which unquestionably results in a physical reaction. Eventually the proper vibration for every person will be found and utilized" (quoted in Campbell 64).

Campbell goes on to list many ways that music impacts our physical and emotional lives:

- Music masks unpleasant sounds and feelings.
- Music can slow down and equalize brain waves. "Playing music at home, in the office, or at school can help to create a dynamic balance between the more logical left and the more intuitive right hemisphere (of the brain) -- an interplay thought to be the basis of creativity." (66)
For example, Mozart or Baroque music (such as Bach) in the background can improve mental organization, while jazz, romantic or New Age music can help to loosen up one who is analytical, shifting awareness from left to right hemisphere, the right hemisphere typically being the side frequently associated with creativity.
- Music affects respiration.

- Music affects the heartbeat, pulse rate, and blood pressure. This can result in less physical tension and stress, calming the mind and helping to free the mind, making it more open to creative ideas.
- Music reduces muscle tension and improves body movement and coordination.
- Music affects body temperature. “On a cold winter day, listening to warm friendly music -- especially music with a strong beat -- will help you warm up, while in the dog days of summer, detached, abstract music can cool you off.” (71)
- Music can increase endorphin levels.
- Music and sound can regulate stress-related hormones and boost the immune function.
- Music changes our perception of space. “In this sense, music is sonic wallpaper. It can make our environment feel lighter, more spacious, and more elegant, or it can make our space feel more orderly, efficient, and active.” (73)
- Music changes our perception of time.
- Music can strengthen memory and learning. Just as music can extend our stamina when performing physical exercise, music can help us to concentrate for longer periods of time and enhance the ability to memorize spellings, poetry and foreign words. (74-75)

- Music can boost productivity. “AT&T and DuPont have cut training time in half with creative music programs. Equitable Life Insurance increased the output of transcribers by 17 percent after introducing music to the office for six weeks, and Mississippi Power & Light raised efficiency in the billing department by 18.6 percent after instituting a nine-month office listening program.
- Music enhances romance and sexuality.
- Music stimulates digestion.
- Music fosters endurance.
- Music enhances unconscious receptivity to symbolism.
- Music can generate a sense of safety and well-being.

Campbell says, “Nevertheless, whether we focus on it or not, the pulse of music subtly defines the boundaries of our physical, mental, and social environments, influencing how strongly, harmoniously, and fluidly life moves within and around us. . . The structure and design of its tones affect our body and our movement, while its changing harmonies and chords can sway our emotions.”

(81)

The Process of Creativity

We’ve discussed just a few environmental factors that influence creativity. But what about the thought processes associated with problem solving? How does the mind work and why do these factors influence creative thinking?

There are two types of thought processes associated with problem solving. The first is *divergent thinking*. This is the first stage of the thought process, or the expansion phase. In The Creative Corporation, Karl Albrecht explains, “It involves stating the problem in various forms, turning it over and looking at it from various points of view, questioning and requestioning basic facts and opinions, identifying values and key factors, gathering more facts and ideas, and generating various options for solving it” (91). Convergent thinking is the opposite, and involves zooming in on key factors -- it is, according to Albrecht, “the progression of ideas in your mind when you’re leaving generalizations behind and going to the specifics” (92). Like a camera with a wide angle and a zoom lens, both types of thinking are needed in order to achieve a full perspective. The most effective creative thinkers can think divergently when necessary and convergently when necessary, but they generally react divergently towards new ideas, just as the person behind the camera lens needs to see the entire picture prior to focusing in on the area of interest.

How is creative thinking achieved? John Kao, in his book Jamming: The Art and Discipline of Business Creativity, fuses the idea of the musical jam session into corporate America, defining three steps to achieve creative breakthroughs:

- *Clearing the mind*: a noted Zen teacher, Shunryu Suzuki, said “In the beginner’s mind, there are many possibilities. In the expert’s mind there are only a few” (46). One must empty himself of all preconceived ideas in order “to reorient the mind from the task-fixated self and its

attendant doubts and fears, toward a nonthreatening, yet vivid world . . .” (47). Jerry Hirshberg, founder and president of Nissan Design International says that one must break out of conventional ways of looking at things. “Innovation requires the capacity to disdain tradition and break with comfortable routines and mastered skills” (Hirshberg 39). Picasso once said “Every act of creation is first of all an act of destruction.” His cubism is a perfect example of this. The technique is actually more realistic than “realism.” For example, if you look at an object with one eye closed, and then the other, it seems to move. With both eyes open, the images become juxtaposed into one. It is our brain that transforms it into what we perceive as realism. Likewise, an object viewed through a glass of water appears fragmented. Once again, our brain transforms the object into the perceived realism. A creative person can see the image from different perspectives. Moreover, many artists, novelists and scientists report that their most creative inspirations came to them in visual images. The use of fantasy, guided imagery and focused reverie helps to clear the mind. Einstein once said “. . . the gift of fantasy has meant more to me than my talent for absorbing positive knowledge” (quoted in Rose 224) Pianist Kenny Werner says that the elimination of thoughts is critical to creativity. “(He) . . . introduces several techniques and exercises for channeling creativity, expanding the intuitive self and maximizing God-given

potential that are based on the principal of surrendering control to a larger, higher force. In Sanskrit, the word for this act of liberation is *moksha* . . . Music can shoot through the musician like lightning through the sky if it is unobstructed by thoughts” (quoted in Milkowski 57).

- *Clearing a Place for Creativity:* When the great saxophonist, Charlie Parker, needed inspiration, he would “go to the woodshed,” withdrawing from people to work out new musical concepts. Managers can design places that will facilitate creativity in their organizations. Kao states that the place should be safe, casual and liberating. It should be small enough to be intimate but large enough not to be limiting. It should be comfortable and stimulating, free of distractions and intrusions. Traditional barriers must fall in order for imagination and innovation to take place. He says that people need “a sanctum for the shared values, perceptions, and goals of the people working on any given project” (Kao 66).
- *Clearing the beliefs:* Kao says that “Success depends on your ability to infuse, imbue, and instill a respect for and belief in the power of creativity throughout your company . . . Creativity begets spontaneity begets stimulation begets invention. . . The end result? A company . . . that’s bold, innovative, imaginative, and profitable” (77). Managers must let their people know that they are valued for their individual

strengths and that everyone in the company has creative energy, bringing out the best in people. Kao says that they must “create an atmosphere that encourages free thinking and risk-free expression, and transforms antagonism into creative energy” (82).

Creativity requires courage and risk taking -- climbing out on a limb. It involves breaking out of routines and rigidity. Rose & Nicholl indicate that Robert Sternberg of Yale, who has extensively researched creativity, sees three stages:

- Insight: Define the problem carefully; sift relevant data from irrelevant.
- Combination: Recombine ideas in a new way (synthesis).
- Compare old and new: This takes time and patience and requires perseverance. You cannot see the value of the new idea unless you do this. (Rose 211-212)

This demonstrates that there is a structure to creativity, and makes it available to all. This is methodical creativity.

An interesting way to remember the steps to methodical creativity is to use authors' Rose and Nicholl's acronym, “A FARCE.” This stands for:

- A Amass -- lots of information.
- F Four-way thinking -- look at it from all angles
- A Alternatives -- generate lots of ideas
- R Recombine -- look for the best combinations of these ideas
- C Choose -- decide on the best combination
- E Effect -- put it into action. (Rose 212)

But what good is this method if the mind is cluttered? How can the creative process take place?

Most experts agree that relaxing moments are often what leads to innovative ideas or breakthrough revelations. I have found that I often come up with innovative solutions to problems when out for a morning run. Being outdoors surrounded by nature's scenery as well as concentrating and focusing on rhythmic breathing, and just the sheer enjoyment of having some quiet time with my thoughts, the sounds of the birds singing in the background, are all factors that lead to creative insight. Likewise, relaxing on a boat in the middle of a lake, or sitting with my morning coffee on the deck can spark flashes of inspiration. Several years ago I moved to a small lake community where I can gaze upon the water for relaxation. I, like Monet, have found that water is an environmental refreshment that can inspire creative thoughts and ideas better than any other. George Opdyke describes an interesting phenomenon that helps us to understand how the simple act of gazing at water can enhance creativity:

On perfectly still water . . . we are often puzzled in distinguishing the surface of the water from the reflection . . . we may see a submerged object . . . without noticing any reflections, and then half close our eyes and see nothing but reflections; we may see at twilight the reflection of people standing on a river bank when it is too dark to see the people themselves; and we may see at night the world turned upside down with the moon and stars in the water below us, and all so realistic that we can scarcely look at the reflection long without a feeling of giddiness, a feeling that we are somehow suspended in empty space. (Opdyke 91)

Moreover, colors in the reflections of water may even be more interesting than the original colors. “. . . the lowered brightness of the reflection softens the brightness of the color . . . reduce(s) the ‘spottiness’ of a scene . . . (it) may enframe the scene . . . (as) in a bit of sky reflected in a roadside puddle.” Also, the tremulous nature of water can either eliminate the reflection entirely or turn it into a moving color picture (93).

Rose and Nicholl discuss the importance of getting away from taxing work in order to refresh the mind and make it more receptive to intuitive impulse:

Unlike computers, the mind is capable of doing many things at once. While we are sleeping, walking in the woods, washing dishes, or shaving, important work is being done outside our awareness. The factory of the mind continues to work while the manager is out, assembling diverse raw materials and putting them together in unusual ways to create new products. (Rose 224)

Einstein was daydreaming, imagining himself as being astride a ray of light when he came up with his theory of Relativity. As discussed earlier, the early morning hours have spawned many great ideas throughout history.

It is this focused reverie that is the great incubator of innovation. However, for most, this doesn’t just come “out of nowhere.” The mind must be supplied with the raw materials and incentive in order to create.

Creativity is an art, but it is also a discipline. John Kao relates this to the musical jam session, which occurs when talented musicians gather and improvise on a theme. The musicians don’t just sit down and play whatever they feel like playing. There is a structure to the music that each of them know. They have a

foundation upon which to build -- a chord structure, which gives the music boundaries. They know it so well that their mind is totally free to improvise within that structure. They have established a "relaxed knowingness," and can move freely within the structure of the chords and the form, whether it is blues, jazz, country, or rock and roll.

These chord structures are boundaries, which, according to Ken Blanchard, author of Empowerment Takes More Than a Minute ". . . have the capacity to channel energy in a certain direction. It's like a river -- if you were to take away the banks, the river wouldn't be a river anymore. Its momentum and direction would be gone (41).

A classically trained musician, while proficient, may not be able to jam. This does not mean he cannot learn to do so. However he, and his audience, are fairly unforgiving of mistakes. Kao states that

In jazz, however, there are no mistakes, only notes that are unexpected within the underlying harmonic grammar. A note beyond the harmonic or rhythmic context is not intrinsically wrong. It is, on the contrary, the great challenge of jazz to introduce such notes into the flow of improvisation, to bring what is outside "inside," and thereby heighten or refresh the ongoing dynamic."
(38)

Managing creativity requires discipline. There is a lot of tension in jazz music, as well as between the musicians. The role of the manager is "to locate the ever-mobile 'sweet spot' somewhere between systems and analysis on the one hand and the free-flowing creativity of the individual on the other" (35). Managers are the facilitators that energize their people and make creativity possible.

In the traditional hierarchical organization, there are many unwritten rules, such as obedience, following orders without question, and never going over your immediate supervisor's head. This is more prevalent in organizations controlled by men, especially men from an earlier era, whose organizational experience was based upon what they may have learned in the military. However, this is the most stifling atmosphere for innovation.

Negative emotions can inhibit creativity and learning. Under stress, the brain reverts to a more primitive function (the fight or flight syndrome), which can cause the mind to "go blank." Employees under stress cannot function efficiently. Progressive managers know this and take steps to see that negative emotions don't take over. Employees who take frequent breaks and have opportunities to have positive interactions with fellow employees in a stress-free environment will be more productive. A short break of only two to five minutes in length every thirty minutes can be a great tool in improving memory and productivity.

The part of the brain associated with emotions also controls health and memory. If a strong emotion is associated with an event, it is usually well remembered. (For example, your first kiss.) The point is that anything that involves enjoyment usually is an enhancement to learning and creativity. Research has shown that when the brain is in a state of positive emotional arousal, endorphins, or opiate-like "pleasure chemicals" are triggered and released, which then triggers an increase in the flow of a neurotransmitter called acetylcholine. These neurotransmitters are the lubricants that allow connections between brain

cells. "So there is a scientific basis for using art, drama, color, emotion, social learning, and even games as educational tools" (Rose 29-30).

Mavericks author Donald W. Blohowiak said, "Companies don't order their employees to surrender their brains at the corporate threshold. Instead they post invisible signs proclaiming, No Original Thinking Allowed. Fertility of thought threatens the secure sterility of corporate consistency" (20).

Blohowiak discusses a condition he calls the "I-I (Idea Inertia) syndrome." He says that there is a built-in resistance to change in an organization, causing people to defend an idea or procedure simply because that's the way it's always been done. "In the process, the creative wind is taken right out of a spirited employee's sails" (21).

I once had a supervisor who would cut down every suggestion I made and would not pass them along. I had won suggestion awards in the past, so I knew that the company valued my ideas. But this supervisor would not only fail to thank me for the suggestion, he would criticize and ridicule me for "making waves." All he wanted was a corporate clone, someone who would do the work as is and not rock the boat. He was a very rigid thinker -- not open to new ideas -- unless they were his, of course.

Being the outspoken person that I am, I finally said to him in exasperation one day that I would not bring any new ideas to him in the future because he obviously didn't appreciate them. The result was that he did thank me the next

time I made a suggestion, but the idea did not get beyond the door of his office.

Rigid thinking prevailed.

Blohowiak quotes Elizabeth Bailey of Carnegie-Mellon University as she cited an interesting story she called the "Mrs. Thomas Edison phenomenon.":

One night, Thomas woke up and said, "I am so excited. I just had this great idea for a light bulb." He explained how it works to her. Then she turned over to go back to sleep. He said, "How can you turn over and go back to sleep with this wonderful idea?" She said, "To have it work, you would have to wire the world, and that is just ridiculous." (22)

Management's responsibility towards an innovative organization is critical. Employers and employees agree -- poor management is the leading cause of American organizational problems. Blohowiak says that "Someone who hates or fears the boss won't produce ideas of the same caliber as those of one who likes and respects his supervisor" (13).

Likewise, a negative environment will not foster new ideas. In his book Cracking Creativity, author Michael Michalko says, "With productive thinking, one generates as many alternative approaches as one can, considering the least as well as the most likely approaches. It is the willingness to explore all approaches that is important, even after one has found a promising one" (3).

The author says that reproductive thinking (retained knowledge) "fosters rigidity of thought." He says that "we need to vary our ideas in order to succeed" (4) and suggests that we consider the following examples:

- The director of the U.S. Patent Office in 1899 said that they should close their office because everything that could be invented had already been invented.
- Nobel Prize winner Robert Millikan said in 1923 that man would never be able to harness the power of the atom.
- German inventor Phillip Reiss came up with a device that would transmit music in 1861. Naysayers discouraged him from continuing his efforts, saying there was no market for such a device. Fifteen years later Alexander Graham Bell invented the telephone.
- IBM and Kodak scoffed at Chester Carlson's xerography invention in 1938, saying that no one in their right mind would buy an expensive copy machine when carbon paper was cheap and plentiful. (5)

The author uses an example of 2 equal rows of dots, one row on top of the other. They appear equal in length no matter how you look at them. However, if you combine them with two convergent straight lines, your perception changes, with the top row appearing longer than the bottom. (see example below) Adding the lines changed your focus and your brain's processing routine, allowing you to see it in a new way.

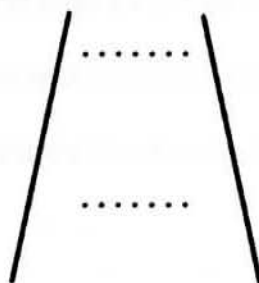
Example:

Look at the following two rows of dots.
Do they appear to have the same number of dots?

.....

.....

Now look at this diagram:



The top row appears to contain more dots. Combining the dots with two convergent straight lines changes your perception of the dots, making the top row appear longer. But they are still equal in length. Combining them with the straight lines changed your focus and led your brain to interpret something different in the pattern. (Michalko 7)

This is what creativity is all about -- taking existing knowledge, adding to it and combining other information to come up with something totally new.

Michalko says, "Genius is analogous to biological evolution in that it requires the unpredictable generation of a rich diversity of alternatives and conjectures" (6). Michalko also says that creative thinkers are not only able to see what no one else is seeing, but think what no one else is thinking. How do they do this?

First of all, they know how to see. “In order to creatively solve a problem, the thinker must abandon the initial approach that stems from past experience and reconceptualize the problem” (9). They then think in terms of visual and spatial forms, seeming to have visual minds (making their thoughts visible.)

Not everyone with the gift of vision knows how to see. The author provides strategies on generating different perspectives, such as learning to restate problems in many different ways and diagramming, mapping and drawing problems. An office environment that is tolerant of this style will encourage creative thinking.

Michalko gives an example in which Toyota asked their employees for ideas on improving productivity. The number of suggestions submitted greatly increased when they changed the wording to “How can you make your job easier?” “When you change the words in your problem statement, you initiate an unobservable process in your mind that may lead to a new thought or idea” (33).

Viewing problems from multiple perspectives can increase creativity. Michalko said that “Leonardo (Da Vinci) believed that until one perceived something from a minimum of three different perspectives, one did not yet have a basis for understanding it” (42). We have seen this theory of multiple perspectives in the four-way thinking step in Rose and Nicholl’s Accelerated Learning for the 21st Century.

In the field of training and education, educational psychologists have studied this multiplicity of perspectives. In one experiment, beginning piano

students were taught to play a C major scale. One group was taught through the traditional method of memorization through repetition, while the other group was taught to learn the scale by responding to multiple perspectives, including their thoughts and feelings. The latter group's playing was much more creative and competent as a result (Michalko 42).

Another factor that enables us to "see" is the human environment. Research at Stanford University demonstrated that positive thinking could speed up the thinking process. Michalko says that "Negatives make us pause and slow down our thinking processes" (38). When management puts on pressure, or someone makes a negative comment, it has a detrimental effect upon an employee's attitude, which then impacts productivity as well as creativity. Negative emotions can result in errors, or "mental blocks." Therefore, it is important to maintain a positive environment. Mary Kay Ash, the founder of the dramatically successful cosmetics company, teaches her sales directors not to tear others down with criticism. If criticism must be given, she says to "Sandwich every bit of criticism between two heavy layers of praise" (37). She says that criticism should never be directed towards a person, but towards *what* is wrong. And sincere praise before and afterwards are important to keep the person from dwelling on the negative. And she says that criticism should *never* be given in front of others. This is demoralizing, and creates bitter resentment by the employee as well as discomfort amongst the co-workers. "A 'Will I be next?' atmosphere is created, everyone feels threatened, and productivity suffers" (41).

Michalko also states that if we can learn to think like a child, asking questions as children often do, we can gain a lot of insight. A manager that discourages questions is a manager that is harming his workers' productivity and the organization's bottom line.

One technique that enables us to make thoughts visible is mind mapping. Michalko says that this "... was formalized as a technique in the early 1970's by Tony Buzan, a British brain researcher, as a whole-brain alternative to linear thinking. Mind mapping makes it easier to access the tremendous potential of your brain by representing your thoughts using key words" (55).

The second part of Michalko's book discusses how creative thinkers operate in order to think what no one else is thinking. They:

- think fluently and have immense productivity. Mozart wrote over six hundred pieces of music, Einstein published 248 papers besides his famous one on relativity, and Thomas Edison gave himself idea quotas of one minor invention every ten days and a major invention every six months. (10)
- make novel combinations. They are "... constantly combining and recombining ideas, images, and thoughts into different combinations in their conscious and subconscious minds." (11)
- connect the unconnected.
- look at the other side.

- look in other worlds. “Aristotle considered metaphor a sign of genius, believing that the individual who had the capacity to perceive resemblances between two separate areas of existence was a person of special gifts.” (13)
- find what they are not looking for. They actively seek the accidental discovery. This is creative insight.
- awaken the collaborative spirit. The author presents principles and conditions under which people can join together as a group and, while retaining their individuality, combine efforts and talents to come up with creative ideas.

Creative Collaboration/Teamwork

It has long been known that the brain is split into two hemispheres, “left-brain” and “right-brain,” with creativity being attributed to “right-brain thinking.” This is our “metaphorical mind,” which looks for analogies and patterns, uses rhyme, rhythm, music, visual impressions, color and pictures. This is also the part of the brain that deals with intangible ideas such as love, beauty, and loyalty. (Rose, p. 33) Linear learners (left-brain oriented) prefer a slow step-by-step buildup of information. Right-brain, or “global” learners need to see the whole picture. Watching a person speak, the right brain picks up nonverbal cues while the left brain processes the information being given. Learning is enhanced when

whole brain functions occur. A speech delivered with emotion will be retained in the memory much longer than one delivered in monotone.

Taking this into account, employers would be wise to take advantage of the "left brain" capabilities of technology to free up time to allow employees to be creative. The mind is not free to create when every moment is taken up with repetitive tasks that could be performed by a computer. However, many organizations use technology to speed up production, but eliminate employees in a short-sighted attempt to improve the bottom line. In the long run, creativity will be stifled when overworked, stressed-out employees are forced to put out twice the volume of work. Jerry Hirshberg said,

No one in a corporation deliberately sets out to stifle creative thought. Yet, a traditional bureaucratic structure, with its need for predictability, linear logic, conformance to accepted norms, and the dictates of the most recent 'long-range' vision statement, is a nearly perfect idea-killing machine. . . A creative bureaucracy is a nearly inconceivable construct. . . It is not that corporations need to disassemble structures already in place, but rather that they must approach and utilize them in fresh ways. Many areas traditionally considered troublesome and even destructive will be found surprisingly conducive to imaginative thought. When creativity is prioritized as the central organizing principle in business, not only is the likelihood of innovation increased, but the more usual concerns such as productivity, efficiency, quality control, team spirit, and sales are also enhanced. The resulting atmosphere, while challenging and stimulating, also becomes supportive and humane, since a workplace safe for ideas is a workplace safe for people. (16-17)

A kindergartner feels a sense of liberation when he topples a carefully constructed tower of blocks. He is making room for the next creation. However,

what if the tower was constructed by his classmate? The result: tears, tantrums, or possibly a fight. Afterwards, however, when tempers are calmed, what takes place? The child who constructed the tower in the first place now starts over and builds a new, better tower. Perhaps it will be in a safer location, and will be more stable, so as to avoid the aforementioned disaster.

Creative people will not always get along perfectly. Hirshberg suggests:

Rather than trying to reduce the friction that naturally arises between people working together by diluting or compromising positions, *creative abrasion* calls for the development of leadership styles that focus on first identifying and then incorporating polarized viewpoints. In doing so, the probabilities for unexpected juxtapositions are sharply increased, as are the levels of mutual understanding. The irony is that out of a process keyed on abrasiveness, a corporate culture of heightened sensitivity and harmony is achieved.” (33-34)

Likewise, *creative fusion* occurs when one holds seemingly antithetical thoughts in the mind simultaneously. Like the atomic bomb, when those thoughts fuse, explosive ideas can result. And *creative collaboration* occurs when two or more people get together with differing ideas, without discarding or allowing any others' ideas to dominate.

An example would be the collaboration that occurred between the artists Pablo Picasso and Georges Braque when they invented cubism. At times, even the artists themselves could not tell their works apart. They brought their ideas together, creating an entirely new style of art.

But most organizations are not made up of Einsteins, Mozarts, or Edisons - they are comprised of everyday people. Unfortunately, this is why so many corporations are in a rut. They aren't looking at the potential in their employees and they are allowing minds to waste as they work on trivial matters with no desire to change the way things are.

In The Creative Mystique John M. Keil says that "Everyone is creative. It's just a matter of quality and quantity that makes the difference" (11). He gives an example of a person driving at dusk and seeing a kid on a bicycle, thinking it would have been nice if he'd had something to make him more visible. The thought comes to mind: "Why don't they paint fluorescent stripes on the sides of the tires?" This was a creative idea. The person may choose not to implement it, but the thought was there. We are all capable of creative thoughts. The difference is not only in what you do with it, but how your company fosters those thoughts and makes use of them.

Keeping an open mind is paramount to an innovative organization. For example, Mannington Mills, Inc. (manufacturer of Mannington flooring products) in the 1920's was open to an idea by company president, Neil Campbell. He picked up a section of floor covering that had been discarded, lying face down against the blank side of another discard. The pattern had transferred almost perfectly. Most people would have thought, "What a mess!" This leader set up test runs, ultimately developing the "kiss" process which they patented, establishing Mannington Mills as a leader in low-cost flooring. Keil defines

creativity as a “state of mind that’s always alert and ready to turn any kind of stimulus into an idea. It’s the ability to look at things differently” (4).

Keil advises workers to put thoughts on the “back burner.” This can actually result in spontaneous, creative solutions to problems at a later time. By keeping a thought in the back of your mind, a solution may appear later -- perhaps while jogging or relaxing. However, he states that the ground work has to have been done first, or the ideas will not appear. Writing down key words before an interruption occurs may trigger a return to the thought after the interruption. Moreover, these key words may be “food for the back burner, which will be working in its own subconscious way throughout the interruption” (19).

Interestingly enough, the author does not feel that creative people are necessarily more intelligent than others. Their curiosity often results in a wide range of knowledge in various subjects, which may lead others to the *belief* that creative people are more intelligent. Oftentimes, however, specialists who thrive in their own particular field may have limited knowledge of other topics. A manager who encourages workers to explore other areas of interest will most likely find an increase in innovation.

In his book, Plan or Die! 10 Keys to Organizational Success Nolan lists Key 6 as: Create and Nurture a Learning Organization. “To succeed in shaping your organization’s future, you must develop an organization that learns well, efficiently, and constantly. Such learning is critical, because competing in rapidly changing environments means your organization must be able to track your

environments, identify changes, and adjust to these changes” (77). The typical hierarchical organization stifles the flow of information, where a learning organization encourages and enhances this flow. “Enlightened leadership believes that if people get excited about learning topics of seeming irrelevance to their job responsibilities, this enthusiasm will increase their interest in learning on the job” (81). This is why many corporations invest in educational opportunities for employees, even if not directly related to their job. For example, AAA will reimburse for full tuition if a course is directly related to one’s job responsibilities, and will reimburse a percentage of the fee if only indirectly related. However, some companies go even further by encouraging employees to study yoga, take fitness classes, or just general life enhancing classes and by offering discounts at various educational institutions, or by paying club memberships at a local health club. They realize the importance of the entire physical and emotional makeup of the employee, and that it directly relates to their ability to manage life’s stresses and to work productively.

Nolan also states that organizations can “. . . enhance creativity by redefining jobs, including making employees responsible for constantly improving the quality of their work . . . [and giving] employees more responsibility for the work they perform, especially if it is accompanied by a removal of external controls” (91). He also indicates that redesigning jobs and helping employees understand where they fit in the flow of work can enhance creativity, as can using a teamwork approach. A company that rewards quiet compliance (the “don’t

make waves” concept discussed earlier) will not see improvements, whereas a company that rewards creativity will greatly increase the number of ideas generated.

Barriers to creativity include limited access to information, as well as highly structured communication systems and restrictive supervisors. Removing boundaries can enhance communication as well as relaxing restrictions as to who can identify and solve problems (92).

In the preface to Empowerment Takes More Than a Minute, author Ken Blanchard says, “In an empowered organization, employees bring their best ideas and initiatives to the workplace with a sense of excitement, ownership, and pride. In addition, they act with responsibility and put the best interests of the organization first” (Blanchard v). He says that sharing information conveys trust, which is crucial for an empowered organization. The result is people who are compelled to act responsibly, as if they were owners of the company. When they have a complete understanding of how their actions impact the bottom line, they see the importance of their job responsibilities.

In Corporate Creativity: How Innovation and Improvement Actually Happen, authors Robinson and Stern discuss what they call:

the fundamental attribution error . . . of mistakenly attributing too much credit to individuals for successful acts or overly blaming them for the absence of creativity . . . A manager who believes that the success or failure of a project depends on the individual involved will focus on changing one thing -- the *employee* -- but if the manager recognizes the influence of the work environment, then that is what will be changed. (27-28)

Rather than identifying environmental factors that will enhance the creativity of all employees, companies are eliminating the employees they have -- those in which they have invested money and time, and who have invested their energy and efforts in learning the job. These companies then try to hire creative people, but “. . . even if it were possible to accurately identify creative people in advance and then pack the company with them, without a work environment conducive to creativity, the results would still be disappointing” (29). The authors go on to say: **“Given the creative potential already present in most companies, the environment is the determining factor for promoting overall corporate creativity”** (29 emphasis mine).

So we see that the office environment extends beyond the boundaries of the physical plant. Helping employees to maintain good physical and mental health as well as balance between their work life and home life will result in happier, healthier, and more productive workers, which will result in greater creative capabilities, leading to increased innovation and productivity.

Chapter III

SELECTIVE REVIEW & EVALUATION OF RESEARCH

We've seen that there is quite a bit of research into creativity, and we've discussed how creativity can be fostered by a nurturing environment. At this point, I feel that we need to explore characteristics of creative individuals so that we can learn how to plan an organization that will enhance the creative abilities inherent in employees. We will then move into a discussion of corporate creativity and corporate character so that we may learn how creative individuals "fit" into an office environment.

Mavericks

The first piece of literature I wish to review is one quoted earlier -- Mavericks! How to Lead Your Staff to Think like Einstein, Create like da Vinci, and Invent like Edison by Donald W. Blohowiak. This work was published in 1992, and is quite relevant to the workforce of the twenty-first century.

The author defines "mavericks" as those who may not necessarily have been successful in school or any formal type of setting, but were able to excel on their own. For example, Albert Einstein failed his college entrance exams, while Winston Churchill failed twice on entrance exams to one school and was at the bottom of his class at another. Charles Darwin performed poorly in grade school, and Charles Dickens never even completed grade school. Pablo Picasso left school

at age ten and could barely read or write. Claude Monet did not complete grade school either, and the Wright Brothers were high school dropouts, as were Will Rogers and George Gershwin. Even Bill Gates, founder of Microsoft, dropped out of Harvard at age nineteen to pursue his interest in computers.

The author says, "Mavericks don't let the rote of the schoolhouse or the confines of the corporation stifle them. They break such bonds with ideas and drive that no rule can hold back" (37).

Blohowiak uses the terms mavericks, creatives, and high achievers interchangeably. "Mavericks aren't just people who challenge authority (then crooks and anarchists would qualify.) Mavericks embody a constructive quality -- they challenge the system to improve. And improving something is a creative act" (52).

Earlier I had indicated that everyone is creative. This is true. Each individual has the potential for creative ideas. However, there are some that just seem to thrive on creativity and challenges.

However, our entire educational system discourages creativity. The author interviewed Marsh Fisher, co-founder of Century 21 Real Estate, who said,

"The whole school system discourages looking at things from a different viewpoint which is really what creativity is all about. Our schools teach us to conform -- you get an A by coloring the tree green, not purple. After a while, you get the picture of how the system works." (34)

The author then quotes educator Neil Postman as saying, "Children enter school as question marks and leave as periods" (34).

Today's work force mainly consists of those who have been through this traditional educational system. Moreover, most organizations encourage this same behavior: learn to comply with the rules. Don't make waves. Those who comply are rewarded with promotions and camaraderie. The old school prevails.

After all, ideas carry risk of failure:

- "Losing my job
- Being labeled a troublemaker
- Not getting credit if the idea worked
- Co-workers not liking the idea
- The boss feeling threatened
- Having the idea rejected." (18)

Remember the familiar poem?

I'm not allowed to run the train
Or see how fast it will go;
I ain't allowed to let off steam
Or make the whistle blow;
I cannot exercise control
Or even ring the bell;
But let the damn thing jump the track
And see who catches hell!

I learned this poem in 1977 in my first corporate position. I have experienced it in nearly every organization in which I have been employed. As a manager, I thought I would have more autonomy, but quickly discovered that I was still expected to be a corporate clone. And despite decisions that were made above my head, I was expected to perform to a set of standards that may not have

even been attainable, and sometimes didn't even make sense. I quickly learned that those who achieved upper management positions were often those who simply complied. No free thinking. No creativity. Just compliance.

Blohowiak quotes theologian Harvey Cox as having said, "What dispirits most people today . . . (is) that they live in a world made by someone else. Their inner desires are anticipated and exploited, their daily schedules are printed out for them, their career trajectory is mapped by benevolent institutions. But they are losing, and they know it, because their inherent need to share in the shaping and creating process is being taken from them" (quoted in Blohowiak 49).

In 1999, a television show about a group of office workers opened with the 1960's tune, "Working in a Coal Mine," and showed vintage footage of coal miners en masse descending into the mine, each with a blank stare, and all looking alike. This was a glimpse into the feelings of most office workers today.

The author discusses Harvard psychologist Howard Gardener's theory of multiple intelligences, which states that in addition to the commonly measured linguistic and logical-mathematical intelligences, there are spatial, bodily-kinesthetic, musical, interpersonal (social skills), and intrapersonal (knowledge of self.) However, he adds six additional: mechanical, time sensitivity (those who skillfully manage multiple tasks, such as restaurant servers), curiosity, street smarts, nurturing intelligence, and moral intelligence. Some people possess high degrees of intelligence in several different areas, while others have a high concentration in just a few (54).

Mavericks don't just respond to a boss's instructions by carrying out an assigned task. Instead they ask "Why?" and offer a better way. They don't need to wait for instructions from the boss -- they have an ability to shape their environment. They have "an acute awareness of what their senses detect, quickly absorbing and recording everything" (55).

Mavericks have some particular traits in common. While most are positive, some can have negative results. For example:

- Work is central to their lives. However, high achievers can sometimes spread themselves too thin because they generally have too many irons in the fire.
- Achieving mastery in work is a strong need -- they constantly seek new input so that they can be a master of their trade and synthesize their own original insights. (this can result in dissatisfaction when in a position that does not provide new challenges.)
- They desire or need to make an impact on society. (Many jobs just don't have a direct impact. A maverick needs to see the whole picture of where his achievements fit in.)
- They feel exhilarated rather than exhausted when pursuing their goals: "Even when they're not in the midst of an epiphany, their minds are buzzing. These people are perpetually 'on' -- they're always in motion; they walk with a spring in their step and a snap on their fingers; they sit

bobbing their legs and drumming the table” (58). (This, however, can translate into impatience.)

- Mavericks constantly test limits, questioning others and themselves, challenging the status quo. (can be viewed as impertinence)
- They are risk takers. (They can be fired for their actions.)
- They live life on the edge. They’re never satisfied -- they desire a challenge and abhor boredom. (can result in dissatisfaction with their job.)
- They have a greater future awareness.
- They possess a more worldly view: they are “keen observers, quick studies, and adept synthesizers.”
- They maintain a sense of social responsibility (56-62).

The negative aspects of the above characteristics can be managed, which will keep employees from becoming cynical. The manager’s challenge is to effect positive change from an employee, helping them to achieve their goals and work effectively within the corporate culture.

Creative individuals don’t just simply respond to the environment -- they shape it. Blohowiak says, “Creative acts require two components: ideas and action. The action component invokes the concept of achievement -- getting something done instead of just dreaming, wishing, or complaining. Mavericks . . . wake up in the morning . . . (and) their insides scream, How can I improve the world today!” (52).

Think of the following quote by an unknown author: "how monotonous the sounds of the forest would be if the music came only from the top ten birds."

Blohowiak tells the story of the electric fence. He says that just as cows learn to suppress their wanderlust after an encounter with the electrical charge from the fence, "people -- highly intelligent entities with judgment and free will -- learn to restrain their innate urges to create at the workplace following one or two zaps by a boss, a creature whose small frame belies his awesome power over others." He goes on to say that "Employees build their own fences around the urge to share their creative ideas with corporate higher-ups, lest they risk a more powerful, even deadly, shock from the boss. Yes, even mavericks learn to restrain themselves . . . causing internal tension for them and lost opportunities for their employers" (76).

How does a manager tear down these mental electric fences? By his personal behavior as a manager. By trusting and being trustworthy. People would rather work hard for someone they like and respect than to work at all for someone they don't.

The author states that the role of a manager is: "Taking responsibility for results while enabling others to think and act innovatively to achieve the goals" (82). This is not easily accomplished, but the author goes on to provide some guidance.

The maverick manager is first of all an educator, then a cheerleader, and finally a quality assurer.

Educator:

Blohowiak says, "Give your people permission and incentive to contribute and they will" (86). Ask for input. Don't penalize if ideas are not similar to yours. As stated earlier, all people are capable of generating creative ideas. Good managers will respond to the ideas they receive and take each one seriously.

It is important to make good use of meetings, turning them into interactive information exchanges. The author suggests lunch meetings because the routine workday doesn't allow much time for creative thinking. Lunch meetings help to get people out of the routine and relaxes them enough to encourage them to contribute.

A good way to open a meeting is to ask, "What have you read, seen or heard in the last week that made an impression on you?" (87) This gets each person to make an initial verbal contribution, which will open up attendees' mental frame of reference.

Another idea on obtaining input is to ask new hires to observe operations and to make notes about anything that doesn't make sense. Blohowiak advises to review those notes after several weeks, and then follow up in about six months.

The author advises that "You can't force creativity and innovation, but you'll find it when you create an atmosphere supportive of it. Shaping such an environment means occasionally surrendering your ego. Ask questions to which you don't know the answer . . . you will learn, your people will grow, and everyone's richer for it" (86).

Some people are “naturally” creative; others need training in how to find and express their creativity; still others just need permission to use their creativity. Good managers will respond to the ideas they receive and take each one seriously.

Cheerleader:

Blohowiak says that the most effective type of cheerleading is treating people like capable adults. Employees will work to keep managers’ trust and confidence. “One of the most powerful motivational speeches on earth is only six words long: ‘I believe you can do it’” (90).

The author recommends direct personal communication, as it is more effective than memos. By delivering information in person, there is more opportunity to receive input in the form of an informal exchange. Maverick Managers *listen*, which is the real power in communication. And “thank you” is one of the most overwhelmingly powerful positive statements you can make.

Things to avoid:

- Saying “Yes, but . . . “ -- this turns a positive into a negative.
- Angry, self-righteous memos, which can knock a sensitive employee off kilter for days.

Blohowiak says, “Allowing people to be high-achievers who are free thinkers, to contribute, and to be themselves, is admittedly a greater management challenge than just monitoring arrival and departure times and productivity rates” (92).

The author also suggests using open-ended questions to stimulate thinking, and recommends that managers increase their tolerance for human variety and diversity, which will free employees to think.

Quality Assurer:

In order to increase work quality, a manager must set high standards and communicate his definition of quality work. Employees should be asked to review their own performance well in advance of the performance evaluation. Moreover, managers should ask employees to review the performance of the manager and the department, asking what improvements could be made.

When making a tough decision, a manager should get input from those who will be affected by it. It is important to thank everyone who made a contribution to the process and explain how he went about making the decision. Limits should be communicated, and when an idea is not going to be implemented, it should be turned down with compassion.

In addition, managers should be accessible and responsive to their people, blocking out time for them and communicating the times they are available -- It is not necessary to be at their beck and call.

Motivation

Blohowiak refers to motivation as a "psychic paycheck." Interest provides a psychic investment for workers. And the most effective motivator is job

satisfaction. The author quotes Richard Bartlett, president of Mary Kay Cosmetics, who said "What motivates people to go further is not just money, compensation, or status -- it's fulfillment and self-esteem" (16).

When employees complain about the way things are done and that management won't do anything to correct it, people give up hope, holding back their ideas and energy. The author calls this condition the *reciprocal motivation deficit*.

James E. Quinn, group vice president of Tiffany & Co., believes that a company's drive to win recognition is similar to what sparks sports teams to work so hard to win championships (p. 103). I agree that the use of praise makes people feel important. And everyone wears an invisible sign that says, "Make me feel important."

Blohowiak gives suggestions on how to effectively use praise.

- Publicly confer appreciation: An artist signs his paintings and an author's name goes on the book cover, but most work product is anonymous. Having your work validated by your boss or your peers validates your contribution. The author uses 3M Corporation as an example: they recognize innovation and excellence with rewards ranging from dinner with the boss to lavish awards banquets, to election to a group known as the Carolton Society. (105)

- Deliver a letter: Send a letter to the employee, or even better, to the employee's home, complimenting him on performance or effort or accomplishment.
- Compliment with your undivided attention
- Say thank you with a gesture, such as flowers, plants, lottery tickets, tickets to an event, books, magazines, gift certificates, etc.
- Arrange for visibility: allow your people to personally present proposals or reports to upper management, or arrange for some type of publicity.
- Reward with growth: Send a top performer to a seminar or conference in a desirable destination, then provide opportunities for them to use their new knowledge.
- Present a teaching opportunity: Give your achievers a chance to strut their stuff.
- Arrange for a special project: Let someone try something new. Ask for volunteers.
- Provide time to pursue a personal project. If you can't give them the time to work on it, tell them you'd love to see them develop the idea on their own time if they'd like. They may just take on the challenge.
- Time away from work: "It motivates more than money and it requires no extra hit to cash flow . . . (it) also helps your hard workers recharge

- their batteries and exposes them to more experiences which can help stimulate even more achievements in your organization.” (111)
- Permission to moonlight: “can provide a refreshing diversion from the workplace.” (111)
- More independence at work.
- Acknowledge failure and consider it a steppingstone to success, paying tribute to the effort.
- Have some fun -- humor relaxes people and releases endorphins, which may add to the creativity quotient.

These are in addition to the standard rewards and recognition: anniversaries, birthdays, promotions, etc.

Money itself isn't everything. If it was there would be more drug dealers, bank robbers and embezzlers. Many people enter low paying professions for other reasons. The author states that Yale psychologist Robert Sternberg suggests that promise of a reward can make people feel controlled and that a preoccupation with monetary rewards can detract from creative work and result in the seduction of otherwise responsible people into “committing counterproductive get-the-prize behavior” (118-119). Money emphasizes winning, not working.

However, inadequate pay for extraordinary work is a mental electric fence. “Reasonable financial rewards communicate that one's contribution is valued” (120).

Blohowiak proposes devising a multicomponent rating system for any increase over current base pay, including:

1. Personal performance variable: Greater emphasis is given to “criteria such as initiative, creativity, and problem *identification* as well as problem-solving skills (and) new knowledge acquisition . . .” (130)
2. Team performance variable: Have team members rate contribution of other team members.
3. Company performance variable: Reward based on meeting company goals.
4. Long-term variable: encourages long-term thinking. (131)

If these suggestions are too radical, Blohowiak recommends budgeting for spot bonuses and special recognition awards. However, it’s important to recognize the performer as soon as possible after the event. It’s usually sales people who win the awards and trips to exotic destinations. How about rewarding other types of employees for outstanding performance?

At the company where I work, if a supervisor recognizes that you went beyond the call of duty or provided special service in some way, they give you a card that goes into a monthly drawing to win a prize. So there is a possibility that you could be entered in the contest many times and never win anything. Also, some supervisors don’t even give out the cards. So an individual who regularly performs well may never receive a reward. While the concept is theoretically

consistent with rewarding certain behaviors, it is ineffective because it reduces it to a lottery type system.

I don't believe in lottery-type rewards for performance -- companies should either reward the performance or not offer a reward at all. If an employee performs, the reward should be given, rather than turning it into a game of chance.

The National Association of Suggestions Systems (NASS) formed in 1942, lists the following recommendations for a suggestion program:

- Enlist the support of top management; this support is essential to the success of the program.
- Determine the objectives top management hopes to achieve through the program. This should be clearly communicated so no one invests time and energy making suggestions the organization will never consider or implement.
- **Provide an environment in which managers and supervisors are receptive to ideas from others.** (emphasis mine). This points again to the effect of the environment on creativity -- an accepting environment is critical if employees are going to feel free to make suggestions. If the organization does not provide this environment, the program can actually be demoralizing, raising workers expectations falsely.
- Designate an individual to administer the program; this person does not accept or reject suggestions but acts as a liaison between employees

and management. (Suggestions should be forwarded to the manager whose area the suggestion would affect.)

- Determine an awards schedule and be prepared to follow through with it. However, awards can actually be a hindrance to innovation, so plan awards based upon your objectives.
- Inform employees about the plan with a written announcement explaining how the system works, how they can turn in suggestions, and how they will benefit from the program.
- Publicize the program on a regular basis, through an employee newsletter, bulletin board, or other means. E-mail would also be effective, as well as monthly newsletter reminders, colorful posters, photos of award winners, or recognizing every suggestion with a certificate of appreciation.
- Respond promptly to each suggestion, whether or not it is adopted, with a letter explaining the company's decision and the reason for it. Immediate acknowledgment should be made with a thank you for participating, advising the employee the likely time frame for judgment on the idea. Then, if the idea is rejected, the suggestor should receive a personalized, thoughtful explanation of the reason for rejection.
- Keep complete and accurate records of all transactions relating to the suggestion system; this helps to ensure proper allocation of awards and prevents duplication of payments.

- Whenever possible, have an officer of the company make the presentation of major awards for suggestions which have been accepted.

The above suggestions are listed on pp. 139-143 of Mavericks. Blohowiak then adds some of his own thoughts based on his experience:

- Overcome the urge to “blow off” ideas that may seem frivolous.
- Involve the suggestor in testing the suggestions’ merit.
- Empower the suggestion committee to take apparently valid suggestions to levels above a yeah-butting manager . . . No one manager should have the power to kill an idea . . .
- Assure swift resolution of pending suggestions.
- Offer wide eligibility to participate.

Customize the program to your culture. (143-144)

The author then gives some examples of innovative companies’ suggestion programs and ideas, such as Ritz-Carlton Hotels, who recognizes that the employee doing the work is the person who understands it intimately and is most capable of making suggestions on improving service and workflow. Managers are obligated to implement all reasonable suggestions on a trial basis.

When deciding on whether to give cash or merchandise awards, managers should remember that it’s important that the award must appeal to the group you’re rewarding. For example, I have no interest in going on a cruise. I had an employer at one time that had recently gone into the travel business selling cruises.

Since he could book inexpensive trips on cruise lines, he offered a cruise as a reward. There were only two employees other than me who were eligible to win. The result: no one won the contest. The goal was difficult to achieve and the prize was not desirable enough. Now, if he had offered a free trip to Hawaii, or even Florida or the Caribbean (not a cruise), I would have worked twelve hour days, seven days a week to win that prize!

One of the most powerful incentives may be recognition. People want to be productive, to contribute, to be involved. Corning, Inc. at one time offered money in exchange for suggestions. They switched their reward program to one offering recognition -- an employee's name on a board, a coffee mug, a free meal - - and their suggestion rate increased eleven times.

Blohowiak at this point discusses the Japanese *kaizen*, or constant improvement program, which encourages employees to constantly think about improving their work, filling out suggestion cards in their off-hours. The result: two-thirds of the Japanese work force participates, while only nine per cent of American workers do so. This could be a result of cultural differences, but many Japanese companies also educate employees on how to think about improving their jobs. And, while Americans adopt fewer than one-third of the submitted ideas, Japanese managers adopt four out of five. The small improvements, however, result in the average savings per employee in Japanese companies being ten times that of American companies (150).

Blohowiak states that innovation rarely occurs from individuals working alone. It often results from team efforts. Working in a structured business environment offers the opportunity to draw on expertise from many different areas. He says, "The organization, then, can incubate creativity rather than stifle it. Not only does it provide physical and technical resources, it also provides social and psychic support which can help spur innovators to greatness" (161).

No one expects someone to begin a job without some training -- at least a set of instructions on how to do the work. However, some companies don't provide tools and instructions for people to be innovative and creative.

Companies that *do* provide the tools include Ritz-Carlton Hotels, Honda, Motorola ("Motorola University") and Du Pont. Blohowiak challenges managers to tap their own resources to assist with education, inviting people from one area to educate those in another area. I feel that asking people to assist with training provides an additional benefit: the person asked feels more valuable and important, and the teacher always learns their subject matter *very* well in order to disseminate the information.

Mavericks discusses methods of idea implementation, or what Blohowiak calls "bureaucracy busting." He suggests providing a stimulating environment, with functional and pleasant physical surroundings. He also suggests:

- Questioning corporate rules and procedures.
- Not overevaluating suggestions.

- Evaluating managers (not just by numbers, but by employee feedback surveys)
- Prudent use of outsiders.
- Substituting the term *work team* for *department*. Work teams are more flexible, adaptive and open.
- Pushing the standards. “Expecting better work from people prevents the work atmosphere from becoming stale with predictability, and more importantly, it encourages continually better work that yields a reinforcing sense of accomplishment” (172).

Blohowiak believes that conflict is energy. He asks what good is a battery with only a positive terminal. He mentions that our most familiar symbols for creativity are the lightning bolt and the light bulb, which are both produced by the clash of opposite electrical charges. This compares with the concept of *creative abrasion* discussed earlier. Opposing ideas can sometimes give rise to totally new ideas, and the emotions and intensity behind them all show that people care about the business. As a matter of fact, welcoming ideas invites conflict because new ideas challenge the current thinking, and thus challenge management. Many managers, unfortunately, value stability so much that they create a self-destructive pattern of what the author calls *groupthink*.

It's a challenge to provide a secure environment where people are free to express contradictory thoughts. Blohowiak says that “. . . earnest dissent is a sign of trust and respect. The most compliant environments often are the most

disharmonious and dysfunctional” (177). And, considering that the United States is founded on the principle of the free exchange of ideas, contradictory opinions should be welcome.

The energy spent holding one’s tongue despite disagreement robs the energy that could be used to find better solutions. People internalize stress when they go along with policies with which they disagree.

Blohowiak goes on to provide recommendations for “orchestrating dissent” effectively, providing some guidelines for managing spirited group discussions and debates.

Mavericks lists some unconventional creative business skills that mavericks possess, and lists a series of behaviors that he considers “The Way of the Maverick.” Some of the business skills include the ability to anticipate, or identify trends, the ability to embellish, or improve and refine what already exists, the ability to focus, inspire, seek, discover, wonder, and share. Behaviors Blohowiak associates with mavericks include the ability to perceive, or attune the senses to function in extraordinary ways, the ability to absorb, marvel, relax, achieve balance, inquire, break habits (which creates physical changes in brain patterns), speak originally without clichés and using metaphors, learn, reflect, ponder, be discriminating, question, risk, hope, accept, imagine and act on thoughts and ideas.

In his conclusion, the author quotes Thomas P. Carney from his False Profits (Notre Dame, IN: University of Notre Dame Press, 1981):

There is a grandeur in any act of creativity. There is mystery in the formation of a new idea. A new idea is one of the most precious things in

the world. It comes along all too seldom. But when it does, revolutions are caused, industries are born, and, in some cases, other industries die as a result of the same idea. It is a marvelous thing to know you have thought something no one else has ever thought, and done something no one else has ever done. (172)

Corporate Character

Every company has character. You sense it when you walk in the door. Does someone look you in the eye and greet you, or do they ignore you? Are the employees running around frantically, or socializing? Are they working in isolated cubicles, or in an open environment?

The physical attributes are determined by management, but what about the people and their relationships? What effect does management have on employee attitudes?

Rob Goffee and Gareth Jones, in their publication, The Character of a Corporation: How Your Company's Culture Can Make or Break Your Business analyze various types of corporate cultures and propose ways in which companies can make positive changes in their corporate climate resulting in long-term corporate success. “. . . culture, technically speaking, comprises an organization's widely shared values, symbols, behaviors, and assumptions. More colloquially, culture is ‘the way things get done around here’” (9).

The right culture for one company may be wrong for another. For example, fiercely competitive companies may require what the authors term a “mercenary” culture, while one requiring creativity may require a “networked”

culture. Plus, there are times when cultures may change as the business changes. A more global business may require a “fragmented” culture, with employees out in the field and communicating via E-mail and fax.

Goffe and Jones indicate that the old corporate models with companies being held together by hierarchy, rules and regulations is fading. They say that “. . . in an era when knowledge transfer, learning, and quick response to varied market demands are key success factors, bureaucracy is like a killing frost” (13).

Goffe and Jones examine sociability vs. solidarity, with sociability being a “measure of friendliness among members of a community” (23) and solidarity being “relationships . . . based on common tasks, mutual interests, and clearly understood shared goals that benefit all the involved parties, whether they *personally* like each other or not” (28). A sociable community may be a fun place to work, but can easily lose track of goals, while a solidaristic organization is very goal oriented, but can be “oppressive or hurtful to those individuals who get in the way” (31).

Before they get into a detailed discussion of four basic types of cultures, each of which can be affected by the sociability and solidarity factors, the authors stress that most organizations are a combination of various characteristics from each culture, and many organizations evolve over time. They also indicate that each culture has its good and bad points.

The next few chapters includes questionnaires to determine an organization’s culture, but I found this section vague and confusing. The

questions were much too general and could be answered differently for the same organization depending upon various departments or subgroups. For example, one of the questions to determine if a communal culture is positive or negative is: “People feel confident and certain about the future.” If you agree or strongly agree with this statement, your communal culture is negative. This doesn’t really make sense because it can vary so much depending upon personalities. Moreover, a statement of general confidence or optimism doesn’t state whether the individuals are confident and certain about their own future or the future of the company. And some members of an organization are inevitably going to be more confident than others, depending upon their position and status in the company.

Once we get past the “tests,” the publication progresses more logically, indicating that the four basic cultures are:

- Networked
- Mercenary
- Fragmented
- Communal

The Networked Culture

In its positive form, the networked culture is a fun place to work. People know and like each other, and socialize together outside of working hours. Knowledge is freely shared, which can be one of the company’s greatest assets. It could take several days for information to be disseminated via traditional means

(corporate memo, E-mail, etc.), but “word on the street” could provide key information being distributed that could benefit the company before memos could be prepared.

I work in a networked culture with a somewhat inconsistent training program. Much of the learning that takes place in the organization occurs during breaks and lunch hours, with employees discussing problems and solutions. Knowing that this occurs, management does not make a big issue out of employees extending their lunch or break time and many times, management is sitting at the lunch table with employees.

Goffee and Jones say that “Networked companies, interestingly, self-select the kind of people who come to comprise them. They attract people who seek a relaxed, convivial atmosphere . . . (and) . . . prefer a fluid environment” (80).

People share ideas freely in the positively networked company with “balanced reciprocity,” (81) meaning they don’t expect others to return the favor right away, but they do expect help when needed at a later date.

Flexibility is another characteristic of the positively networked company. Moreover, Goffee and Jones state that “creativity is also enhanced because creativity flows more freely out of situations characterized by trust and openness” (83). However, not all networked organizations experience this. For example, even though I work in a networked organization, rules and policy still get in the way of positive changes and good ideas.

Overall, the positively networked organization is usually a fun place to work and employees are often loyal. However, the negatively networked organization can be quite the opposite, driving good people away with its tolerance for poor performance, politicking, and lack of focus on clear objectives. Strong performers who are carrying the load and burning out feel resentment against the poor performers, whom management may tolerate because of a fear of firing them or because the person is in the “in” crowd. The high sociability factor leads to excessive politicking, with the formation of cliques. In this environment, the authors say that “risk avoidance becomes a critical career management skill. People are afraid, frankly, of being knifed in the back by someone from another clique. In the worst-case scenario, people in this form act like penguins. No one wants to be the bird at the edge of the flock, for fear of getting pushed off the ice floe” (89).

The Mercenary Culture

In its positive form, Goffe and Jones say that “there is a certain efficiency about action in mercenary cultures that dispenses with debate and discussion and gets right to it” (99). Socializing in this culture is not for friendship. The purpose is to obtain advice, information or insight. Winning is the goal, and everyone in the organization shares that goal, resulting in an organization with high solidarity. “Mercenary cultures are composed of eagles, but of eagles flying in formation” (100).

Often, the playing field is level in a mercenary organization, with many calling their employees “associates.” Hierarchies are flat and unnecessary layers have been eliminated. People are usually promoted based upon quality of work. Knowing someone may have something to do with it, but poor performers will not move up in this culture. And this organization can be highly effective when a firm’s customers judge it by numbers, since that is the focus of a mercenary culture.

A negative mercenary culture is characterized by restlessness and ruthlessness. The focus is entirely on hitting targets. However, it works well when fast action is required, when time frames are short and when problems are simple. This can result in what the authors call “quick suicide.” “A wrong decision is quickly reached, and because of the assumption of high solidarity, everyone marches off the cliff together in perfect step” (115).

I believe the most negative aspect of the mercenary organization is what happens during times when the bottom line does not meet expectations: with their emphasis on cost control, they downsize and reengineer, losing opportunities to expand and reshape their markets. This happened when Xerox went through a cost reduction period. They lost out on opportunities to exploit their capability in laptops, laser printing, and user-friendly computers.

When a mercenary organization ruthlessly slashes budgets, they “. . . tend to strip away any opportunities for learning and the exchange of tacit knowledge. They pour away their accumulated experiences, and with it the continuity of

processes and people that make trust or meaningful action possible. When the good times return, they may have lost their critical capabilities. They're not lean, they're emaciated" (115-116).

I agree with the authors' premise that creativity cannot exist in this environment, much less thrive. "... you can't have creativity without an authentic tolerance of uncertain outcomes, and even failure." The mercenary's intolerance for failure thwarts any possibility of a creative organization.

Likewise, complex learning cannot take place in a mercenary culture because complex learning requires time and failure. You don't learn to hit the tennis ball into the opposite court without many balls going outside the box or into the net.

The sharing of information and knowledge creates synergies between different departments in an organization. Often times the mercenary employee wouldn't even know where to look for these synergies; whereas, a communal or networked organization gives ample opportunities. The authors give an example of two departments at Glaxo-Wellcome getting together at an after work beer party, sharing information that they would not have shared had they not gotten together, and ultimately developing some highly successful medications.

The authors feel that the most critical negative feature of the mercenary culture is the lack of personal ties. People have no loyalty to the mercenary organization. A good CEO will make sure there is some degree of sociability in the organization in order to retain good people.

The Fragmented Culture

The fragmented culture is low on both solidarity and sociability, as its name implies. Often, this is a result of people working out of their homes, or in branch offices throughout the world. Despite the many challenges associated with management of this culture, . . . “in some instances and environments, it is the culture that gives its members the most freedom, flexibility, and fairness. It demands nothing but high performance . . . employees are judged on their productivity and the quality of their work, no more and no less” (125-126).

One characteristic of the fragmented organization is its dependence upon great ideas. Management hires people for their ideas and intelligence, not for their sociability and politicking. Free thinkers can thrive in this culture.

“Because they honor ideas before individuals, fragmented cultures display an enormous tolerance for idiosyncratic behavior” (129). It doesn’t matter what you wear to work or who you socialize with as long as you have good ideas and can carry them out.

Would this be a good fit for an individual with poor time management skills or low self-discipline? Obviously not. However, individuals who are intrinsically motivated to work hard will most likely succeed in this type of setting.

As we’ve seen so far, each culture has a negative side -- and so does the fragmented organization. Often the type of individual that is drawn to this organization can be very self-centered and arrogant, and may have very little loyalty to the organization itself, working only to further his or her own goals. But

possibly the biggest drawback is the fact that learning can be hindered because information is not shared. People must learn on their own, and don't reap the benefit of teamwork. Such environments don't tend to support creative collaboration, which in many organizations is a "competitive imperative" (141).

On the positive side, however, this form can be very accommodating to people with families that need flexibility. And people working from home can result in cost savings to the company -- there is no need for the company to pay for that additional office space.

In summary, the fragmented culture "provides the widest possible scope for individual freedom and creativity" (134). If properly managed, this culture can be a very positive competitive force.

The Communal Culture

Goffee and Jones ask us to "Imagine a networked organization and a mercenary one combined, the first bringing its high levels of friendship and commitment and the latter its performance focus and energy" (145). This would be the positive form of the communal culture. In it "You find creativity and openness toward ideas joined with a fierce determination to defeat the competition. You find a meaningful interest in process and a strong concern for results. No wonder the communal culture is so beloved by those inside it and inspires such consternation in its marketplace opposition" (145-146).

In its positive form, the communal culture is a fun place to work. People live their jobs and love their jobs, working together towards common goals and maintaining fierce loyalty to each other and to eliminating the competition. They love the product and are deeply committed to the organization. They have a sense of urgency and zealously about their product. Their leaders are often inspirational, “. . . sources of *meaning* for the organization, giving moral authority to company practices, strategies, even rituals” (152).

Some companies even take the socialization to the extent that their employees don't have an assigned desk or seat. They have a storage area for their belongings, but then they simply select a vacant work area. This places them in a different environment each day, extending their social circles and reducing cliques. This also creates a “diversity of emotional experiences” for employees, which can enhance creativity. Some areas may be peaceful, while others are filled with action. Individuals can select an area that matches his or her needs that day or for a particular project. It also exposes them to different people and thus new ideas.

It is important for managers to hire people who will fit in well in a communal culture. This doesn't mean that they should hire people from one ethnic group or with similar ideas, but people who are flexible and oriented towards teamwork.

The authors give several examples of communal organizations, one of which is Hewlett-Packard. HP employees are loyal and no one is asked to sacrifice family for business obligations. They even have an informal mentoring system.

Those who aren't performing well are assigned a mentor, who helps them to succeed. As a result, firing is rare. And when layoffs were necessary in the '70's due to low sales volume, many employees cut their hours to part-time status to help save co-workers' jobs. Now that's loyalty!

As with each culture we've discussed, there has to be a down side, and there is. Oftentimes, employees will become so involved in the corporate "family" that they forsake their own families, which can cause resentment at home and affect the worker. Moreover, the strong inspirational leadership can make people feel like they don't dare have a dissenting idea for fear of being labeled a heretic. And if the leader should quit, retire or die, the organization can quickly become fragmented. But overall, ". . . if you've got the considerable energy and desire to make the commitment to the communal form, this culture's ability to deliver competitive advantage and personal fulfillment makes it well worth the effort" (167).

The last portion of this publication discusses how to move from one culture to another. As companies evolve, their cultures will often change . . . sometimes moving to an atmosphere that may be more advantageous, but other times detrimental to their future and that of their employees.

A tennis coach once taught me to never change a winning game, but always change a losing game. If your company is not succeeding, sometimes strategies need to be reevaluated. If a culture in its positive form begins to move towards its negative form, the progressive organization will recognize the signs and take steps

to move it back towards its positive form or it will take steps to transform itself into a positive form of the culture towards which it is moving.

For example, today's market is becoming more global, which could result in greater fragmentation of an organization. By recognizing this trend, a corporation could begin placing employees in the areas throughout the world where they will be most effective, and incorporate a global communications strategy to unify them. Selecting employees who are creative and value independence and adventure would assist in this transformation. Workers who prefer working in a more communal environment could be part of the home based team.

In this same scenario, I believe it would be detrimental to the company to terminate their local employees. Retaining valuable, well-trained employees and giving them an opportunity to select their niche would result in more favorable long term results.

The bottom line is it costs money to train new people. Working with the talent within your organization will result in greater profits in the long run.

Chapter IV

PHYSICAL ENVIRONMENT

It's a beautiful late winter day, with temperatures in the 70's -- an unexpected delight in early March. I have a clear view of the lake -- no foliage blocking my vision -- and can enjoy watching the occasional boater or skier go by. Someone has built an aromatic fire and the fragrance is drifting through the neighborhood -- the scent brings happy memories of vacations at Big Cedar Lodge, or enjoying the sunshine at Mid-Vail while taking a break from the slopes. The birds are singing and life seems pleasant. I'm on vacation this week, and as a reward for my efforts on this paper, I'm looking forward to a trip to Jamaica later in the week. I am in an environment that is conducive to creativity: my surroundings are pleasant, visually and aurally. There is an enjoyable fragrance to provide fond memories. And I am free from the stress of the workplace.

Obviously, it would be impossible to recreate this situation. Much of it is just circumstantial. However, I did plan my vacation at a time when I needed the break from stress and when I was hoping there would be some nice weather. And, if not, I planned the trip to the tropics as a reward: *motivation!*

As we've seen, physical environment can make a tremendous impact upon our emotions and our ability to think and create. Yvon Chouinard, CEO of Patagonia is quoted in 1001 Ways to Energize Employees as saying, "I don't think it's possible to make a great quality product without having a great quality work

environment. So it's linked -- quality product, quality customer service, quality workplace, and quality of life for your employees" (Nelson 185).

This chapter will deal with the results of my studies and how to apply them to the real world. I will discuss various ideas for the office setting, giving examples of successful companies' use of them and use the information to theoretically "design" a model insurance claims office.

Ideally, we would each be able to design our own workspace. Given the fact that this is not feasible, let's explore some possibilities to enhance our surroundings.

Solutia's Solution

Approximately two years ago, top officials at Solutia, Inc. had the opportunity to design a new corporate center from the ground up. Their challenge was to design a place where people could be in the right places to react and make decisions quickly. The employees were feeling somewhat hurt that Monsanto had cast them off, creating an additional challenge.

In designing their new home, Solutia officials "wanted to emphasize function over form and install the latest in high-tech communications equipment. The building would have open work spaces where employees could be grouped quickly by task forces to solve problems" (Hudson BP10).

The architectural firm set up four sample workstations and let employees decide which they preferred. The company consists of engineers and scientists

(Solutia was the chemical division of Monsanto), so some of the options were too radical for their conservative nature. And the leaders didn't want anything flashy. They didn't want employees to resent the expense, and particularly didn't want those working in the factories to feel less important than those working at headquarters.

No one in the new building has a corner office, and the CEO has a 12' x 12' office just like his other senior executives. In their conservatism, they opted for the private offices to be in the interior, with the outside light for employees. The windows overlook a lake and trees -- there is a hiking path along the edge of the lake. Laptop computers can be plugged in virtually anywhere. There are three small conference rooms on each floor, used for problem solving or quiet time. And the climate-control system is designed to fit personal needs.

The building has its critics. One designer called the workstations "Dilbert cubicles," referring to the popular comic strip about corporate cubicles. However, it does seem to fit the personalities of the employees and the needs of the organization.

Cubicles

I believe that Solutia's emphasis on windows for the employees sends a positive message, but private offices could be partially enclosed with glass to provide views for upper management. This would also allow them to remain in

touch with their people, while maintaining privacy for sensitive information exchanges.

While cubicles have their critics, they can be very functional, providing some privacy for workers who aren't at "private office" level. They give each worker a place of their own, where they can decorate and put up personal photos of loved ones. However, the walls of the cubicle can impede the natural lighting and isolate workers. As a matter of fact, the corporate slang term, "prairie dogging" results from the process of employees standing up to peer over the top of their cubicles in order to see what's happening.

Once again, glass could be used to allow better visibility and less isolation. Privacy suffers, but communication is improved.

In my ideally designed office, there is a lot of open space and work stations can easily be modified to adapt to new circumstances. Supervisors would be located close to their people and easily accessible. Natural lighting would bathe the area, with blinds available to control sunlight that is too bright. Storage space for each person would be adequate and include plenty of room for personal belongings.

Earlier we discussed how music can enhance learning and creativity. According to Don Campbell in his book, The Mozart Effect, "music can activate the creative right brain and the more logical left brain, which enables us to find more creative solutions to our problems and tasks" (Campbell 202). Campbell gives an example wherein he was invited to speak before the board of a major

computer firm. The agenda for the day was long and grueling. He began with a short exercise asking them to jot down some points they wanted to discuss at the meeting while listening to music by Bach. Then he had them join with him in doing a rhythmic exercise using paper plates as "cymbals" to the beat of an Irish folk dance. Afterwards, when everyone had relaxed and loosened up, he again put on the Brandenburg Concertos and asked them to write solutions to the problems they had written about earlier. The board members reported to Campbell the next day that this had been the most fruitful and creative session they had ever had (202).

Du Pont has found that they can cut training time in half and reduce training staff by a third, doubling the number of people trained with their listening program. Productivity rose six per cent at Prentice-Hall after background music was introduced to the mailing room. Clerical errors at a large utility company decreased by thirty-seven per cent when using background music. "The evidence is in: Music in the workplace has been shown to raise performance levels and productivity by reducing stress and tension, masking irritating sounds, and contributing to a sense of privacy (199).

However, music can lose its effectiveness if overused. Campbell states that optimal programming indicates that twenty-two minutes per hour is the most effective. Muzak, formerly known for "elevator music" is now programming music for different times of the day and different types of activities. Moreover,

taking active “sound breaks” with employees getting involved in two or three minutes of a musical activity, can create energy.

The idea of flexible work areas for teamwork is also appealing. Some companies don't assign work spaces. The employees are portable, taking their work tools with them to various locations. This can be an enhancement to creativity. Working in a different space can help to provide different perspectives, which, as we've discussed earlier, can help to free the mind to explore new possibilities and ideas. However, it can also make the workers feel like they have no “home.” So I prefer that each employee have their own workstation, but have the ability to move to new, flexible stations for teamwork. Laptop computers would make this easier, but are not always provided. In my organization, we need oversize monitors to display the many applications that are running on a continuous basis. Additional oversize monitors could be provided in this flexible area, with plug-ins available for laptops also.

One area that many companies don't consider that can increase morale is their restroom facilities. New home sales increased dramatically when builders began installing luxury bath facilities. When I was a Realtor, I found that homes with oversize baths with large windows and whirlpools sold much more quickly than those without.

I once worked at a facility that had luxurious restrooms. The workers really appreciated the full privacy doors, but the fixtures were black and the lighting was so poor that one could barely see! The facility where I currently work

has the traditional arrangement with plain white sinks, no decorating touches whatsoever, absolutely no music to mask sounds, and the most sickeningly sweet deodorizer pumping out cherry-cough-syrup flavored fragrance when it works at all. There is no place to change clothes and no natural lighting or fresh air.

I recommend that employers provide facilities with changing areas for employees who may need to change clothes to attend a function after work. Full privacy doors should also be provided, and music should be piped in 100% of the time. Dried flowers should be placed in the room (for the men's room, silk plants) and faucets should have automatic sensors so dirty hands don't have to touch handles. The exit door should push open also so that workers don't have to touch door handles, since there is no way to enforce hand-washing. Antibacterial hand washes should be used, with softeners to prevent dry hands, which can result in open cuts that can become infected. This would help to eliminate the spread of illness that cuts into productivity.

The effective use of artwork throughout office facilities can also contribute to employee morale and creativity. Contemporary patterns and rhythms as well as the effective use of color can stimulate the brain.

Stress-Free areas

Today's competitive environment often results in a great deal of stress. We have seen how stress can impede creativity and productivity. So how can we reduce stress in the office?

Employees in an insurance claims office have to deal with phones ringing constantly, claims that need to be paid in a timely manner, and angry claimants, not to mention supervisors' demands and the daily deluge of mail. Employees don't often take breaks because the phone won't stop ringing and the work is too demanding. And if they do take a break, there's no place to go except the cafeteria or outside. Outdoors is nice when the weather is fair, but not in the winter.

Some companies understand the need for mending the office worker's soul and provide a much needed respite in a meditation room.

Acacia Life Insurance Company designed a room where employees can escape. It is dimly lighted and decorated with soothing paintings, comfortable chairs, a couch and *no phones*.

In an article entitled "Meditation Time can Keep Workers' Cool," reprinted in the October 8, 1998 edition of the St. Louis Post-Dispatch from the Washington Post, Mary Alice Mezenwerth, manager of Acacia's health services is quoted as saying that stress can not only cause a lot of physical symptoms, but it can cause a decrease in productivity. She said, "It's hard to focus on the job when you're focusing on the stress." Acacia was listed as one of the 100 best employers for working mothers that year by Working Mother magazine and is known as a progressive employer.

The article states that the National Safety Council estimates that one million employees are absent due to stress on an average workday. And in 1973,

nearly forty per cent of workers reported extreme satisfaction with their jobs compared with less than twenty-five per cent today according to the American Institute of Stress.

PT & Co., a public relations firm in New York, went even further, designing a large window-walled area into a meditation room in an effort to promote creativity. I prefer this design over the windowless quiet room as it has the benefit of natural lighting and, preferably, a view of nature. However, if an office is located in an unattractive setting, the windowless room might be better, and a mural could be used in place of the view. This particular room at PT & Co. has large pillows, soothing paintings and a water garden. It is also located away from the noise of the open office. One employee said that she uses the room when she feels paralyzed at her desk. Chief Operating Officer John Frazier said, "As a company, we're really trying to create a workplace that is nurturing for employees" (St. Louis Post-Dispatch C-5).

My "meditation room" will double as a creative workspace. It will have a large window overlooking trees and a lake or pond. A waterfall or fountain would be nice, as it provides soothing sounds. There will be a door to a balcony or deck, and on nice days, the windows or door can remain open so that employees can hear the sound of birds and flowing water. It will be decorated like a sunroom or solarium, with wicker furniture and lots of cushions and pillows. There will be groupings of plants and indoor trees -- and an indoor fountain. Soothing music will play softly in the background, but this can be adjusted by the people using the

room. Classical, jazz and new age music will be the norm, since these are the types that have been shown in studies to enhance relaxation and creativity. The music will *not* be provided by a radio. Commercial radio has too many interruptions with obnoxious ads. There are satellite and digital music programs available to purchase, and these will be the providers.

There will be interesting artwork on the walls, and soft lighting. Cool hues of green and blue will create an atmosphere of relaxation, with complementary colors in artwork and furnishings to add brightness and stimulate the mind. There will be a work area for those who want to write or create, and there will be relaxation areas. However, there will not be any meetings held in this room as it should be available to employees who are seeking quiet.

Lighting and Color

Columnist Dale Dauten, known as The Corporate Curmudgeon, writes for King Features. His articles are featured in the Business Plus section of the St. Louis Post-Dispatch. He recently said:

Our modern office buildings are straight out of the Architecture of False Economy . . . If you make decisions based on the building's productivity instead of the building's costs, you find that some relatively inexpensive changes can offer huge returns. The greatest leverage is with lighting. The eye yearns for natural light. We see better, feel better, look better. If you design a building so that it is mostly lit by windows and skylights, remarkable things happen: Workers' compensation claims plummet (from 20 a year to fewer than one, at a carpet factory in Georgia), customers buy more (an average of 25 percent more in one study), and people get smarter (when some schools in North Carolina switched to extensive

daylighting, students' scores on standardized tests rose 5 percent.)
(Dauten BP 3)

The humorist goes on to say that "The new lighting will be such a success for your and your operations that you'll want to start on air quality -- the next Big Thing in office buildings is windows that open -- and then the eye quality of the interior spaces. These changes only appear to cost more. Beware the Architecture of False Economy. Your building is shaping you" (BP 4).

Color affects people physiologically as well as psychologically. Reds tend to excite while greens, blues and grays generally produce a calming effect. Natural woods have a tendency to reduce stress also. Once again, we can turn to nature to instruct us in the use of color: the blues and greens of water as well as the varieties of green foliage provide a canvas for brightly colored floral accents.

There are a lot of options when it comes to color selection. Organizations should consider the needs of the various departments when choosing colors. For example, in an insurance claims department there is a high level of stress due to the nature of the business. Employees are trying to assist customers who have suffered a loss of some type. Claimants' emotions are frequently at a high level and the claim representatives must be able to deal with customers in a calm and rational manner. A cool palette is recommended for walls and carpeting. Bright, complementary accent pieces and artwork can then be used to stimulate creativity. Employees should have the option to personalize their space with colors they prefer. One idea would be to use sage or forest green carpeting throughout, then

provide employees with the option of choosing from a selection of coordinating colors for the upholstery on their chairs: red, yellow, blue and teal. Or, one could decorate walls and carpet with a neutral taupe (which can appear warm or cool depending upon lighting and surrounding colors) and once again use brightly colored accent pieces.

However, those in charge of decorating should research the effects of various colors on human behavior. When our human resources department was recently renovated, employees were enthusiastic about the elimination of the burnt-orange carpeting that had been used throughout the headquarters building. Imagine their dismay when they discovered that the new decor consisted of the orange carpeting. An inquiry into the reason for this produced a response that the color didn't show dirt easily. And the decision was made by a person that did not work in that department.

Health, Family and Fitness

Many companies have found that the leading cause of unscheduled absenteeism is personal and family reasons rather than illness. Reuters News Service columnist Sherwood Ross cites a study by CCH Inc., a firm that provides human resources and legal information, reporting that family issues have recently taken over as the leading cause of unscheduled absences. The cost of absenteeism in a small firm (fewer than 100 workers) involves a direct cost of \$1,044 per year, while larger firms are losing \$757 per employee annually. In addition, there are

indirect costs such as hiring temporary workers or paying overtime to others. The loss in customer service can't be measured, but certainly is a factor. Paul Gibson, a legal analyst for CCH said "Employers who want to reverse this trend toward increased absences due to work-life conflicts are going to have to pay more attention to putting programs in place that give workers the resources to manage work-life issues" (quoted in Ross BP 4).

Ross goes on to say that the most effective work-life programs for reducing absenteeism are:

- Flexible scheduling
- On-site child care
- Emergency child care
- Compressed work week
- Leave for school functions.

Gibson is quoted as saying that, "based on the costs companies have reported that they're incurring, . . . implementing an appropriate mix of work-life programs should have a positive impact on the bottom line" (Ross BP 4).

Therefore, my ideal claims office would provide each of these benefits to employees. In addition, there would be a fitness center available. If not on-site due to budget constraints, the company would offer reduced fee or free membership at a local health club. The benefit to the company would be healthier employees, with a decrease in absenteeism.

At my current place of employment, every special event is celebrated with ice cream, cookies, cakes, doughnuts, etc. It seems as though there is a special event every day. And many of the employees partake of these items every day. The result is a considerable amount of obesity and poor health.

My ideal claims office would reward people with time off instead of food. Food is good occasionally, but not every time. It is frustrating to be health conscious when the company announces that they are rewarding everyone's effort by bringing in ice cream from Ted Drewe's. It's not a reward unless it's something that everyone likes. And, while I like ice cream, I'm committed to not consuming any snack food at work in order to stay trim and healthy. There are several of us in the unit that actually get resentful when they do this because we feel left out. Wouldn't it be better to make an announcement that everyone could leave fifteen or thirty minutes early that evening? Or gather everyone for a fun walk or a spirited game. Or hire a massage therapist to travel from desk to desk giving quick shoulder massages to ease stress.

The Illinois Trade Association in Glenview, Illinois reimburses employees for nontraditional medical care such as chiropractic, herbal therapy, etc. And, once a month, each employee is eligible to receive a free massage on company time. They haven't lost a single employee in five years (Nelson 192).

The founder of Lands' End of Dodgeville, Wisconsin built an 80,000 square foot activity center as a \$9 million gift to his employees. He let them decide what items to include. The center contains a swimming pool, glass-walled

indoor track, exercise room, whirlpool, gymnasium, a photographic darkroom, outdoor tennis courts and picnic areas (Nelson 191).

Some companies offer on-site daycare for children, and some include daycare for adults. As the baby-boomer generation ages, there are many families that are caring for aging parents, which can stress the income as well as time management.

An organization's overall facilities and environment can make a tremendous difference in the attitude and energy of its employees. Is the organization set up in such a way that encourages employees to work together or does it create divisions that discourage or even undermine cooperation and collaboration? Don't forget -- most workers spend about a third of their lives at work. The workplace should be a comfortable, inviting place that employees can look forward to, rather than dread spending time in. (Nelson 185)

Chapter V

HUMAN ENVIRONMENT

Many companies send their employees off to retreats so they can “become creative.” These retreats are excellent opportunities to motivate and communicate, but they aren’t “real world.” As a matter of fact, most of the examples of innovative ideas we’ve seen didn’t come about as the result of a corporate retreat. And, according to Alan Robinson and Sam Stern in their book Corporate Creativity: How Innovation and Improvement Actually Happen, “most of the research on creativity to date does not apply to the business world. It tends to address only the creativity of individuals working in isolation. Almost none of it has taken into account the environment in which the individual works” (44).

In order for innovation to occur on a daily basis and in the corporate environment, the workplace must foster creativity. In this chapter, we will discuss the human environment that is optimal for innovative ideas.

Many companies visualize youth with energy and creativity. However, Robinson and Stern say that “age is often an important asset in the business world, because with it comes experience” (44). So first companies must be willing to employ older workers and do whatever is necessary to retain them. The authors tell of a doctor by the name of George Beard, who, over a hundred years ago “contended that experience grows continuously throughout life, while enthusiasm peaks at about thirty and then declines slowly. He imagined a period in the lives of people when the combination of their experience and enthusiasm becomes optimal

for creativity. In this sense, Beard connected creativity with the working environment, which certainly influences enthusiasm and, to some extent, experience” (45).

Consider Dick King-Smith, seventy-two-year-old author of the book that spawned the hit movie, *Babe*. He had taken up writing in his mid-fifties. Prior to that he was a dairy farmer and a schoolteacher. The combination of experience resulted in the creativity of an enjoyable movie that has a moral. Colonel Harland Sanders, founder of Kentucky Fried Chicken, started his company at age sixty-five.

The organization that wants increased creativity should remember this before downsizing and “golden parachute” retirement programs. Companies should retain their experienced people and let them work in an environment that sustains their enthusiasm, letting them know that their expertise is valued and giving them opportunities to create.

Companies should also not expect creative ideas only from “experts” in that area. I recall sitting in a computer room with many computer experts, those who had worked for years at McDonnell Douglas and spent their lives programming and designing on computers. They wanted to perform what should have been a simple function on the computer and couldn’t figure out how to do it. At that time, I was new to computers and had no formal training whatsoever. I looked at what they were trying to do and suggested something very basic and simple. It worked! Their minds had actually made the task seem more complex than it was and they were unable to see the simple solution. But one who was

unfamiliar with the normal process was able to figure it out. The point is that “a company cannot expect creative acts in a particular area to come only from the experts in that area” (47).

Many innovative ideas occur by fortuitous incidents. And, “in a corporate setting, it is more the *environment* that is fluent, because it presents employees throughout the company with thousands of new possibilities every day (51).

In companies, creativity does not happen magically when people are taken out of their workplace and a procedure is invoked to set up a special environment where creativity might flourish. The workplace itself is alive with the unexpected; when employees interact with it, it yields provocations no one can possibly expect. (52)

So how does management promote creativity? What about rewards and incentives? These are widely used by organizations, but do they work?

Incentives and rewards provide *extrinsic motivation*. The whole reason to work on something is to win the prize. However, creativity depends more on *intrinsic motivation*, the inner desire to see something succeed. The prospect of rewards can encourage people to take shortcuts in order to receive the reward. But “much creativity is the result of informal poking around, experimenting, and exploiting the unexpected. In the race for the reward, not only is creativity sacrificed, but opportunities for what cognitive psychologists call *incidental learning*, the important knowledge and insight gained from such exploration, are greatly reduced” (55).

The Japanese *kaizen* system relies on intrinsic motivation for generating ideas. Perhaps this is why it is so successful.

Many ideas are generated by employees who are actually doing the work on a daily basis and recognize the need for shortcuts or improvements. However, in an environment that discourages workers from making suggestions, improvement and innovation will rarely occur. Especially if there are multiple levels through which a suggestion must pass prior to implementation.

It is interesting to visit with new hires in my organization. After they've been working a few weeks, they often will say something to the effect of, "This procedure is such a waste of time. Wouldn't it be great if . . .?" Tenured employees chuckle when they hear this enthusiasm. They have tried to make changes, but are constantly told not to try to change things -- just do their jobs and live with the system as is. If upper management should decide to make a change, they'll let everyone know.

And our current suggestion program is archaic. You complete the form, turn it in, and six weeks later you will receive a form letter acknowledging your contribution and letting you know it will be considered. Then, you may never hear anything about it again. As a matter of fact, I accidentally discovered that a suggestion that I had made nearly one year ago had been implemented without any notification from the company that they were using my suggestion. I took this up with my supervisor and received a \$50 check the following week. There was no

“thank you,” and no recognition. But I did appreciate the check. Would I have received it if I hadn’t followed up? Possibly, but I doubt it.

I have been with my company for two and a half years and during that time I have only seen one person recognized for an idea. The particular idea was one that I had come up with much earlier but didn’t follow through to suggest. The suggestion program was difficult to use and required me to compute figures to determine cost-savings. I did not have access to department budgets, and was already overwhelmed with work, so I never completed the form. Months later, a supervisor made the suggestion and won an award *and* recognition via a company memo.

Robinson and Stern advise that “The desire to be creative is already present in most people, and companies only have to unleash it” (145). An effective suggestion program should have the following characteristics:

- It must reach everyone. It is impossible to predict who will come up with a creative idea, so everyone must be familiar with the system and have ready access to it.
- It must be easy to use. When my company implemented intracompany e-mail they asked for suggestions on how to effectively use it. It was simple to submit the suggestion: simply use the new e-mail system.

My suggestion was very basic: change the current system of filling out a complicated form and use e-mail for the suggestion program. I won an award and recognition for my idea, but it has never been

implemented, and I have had employees tell me they didn't even know we have a suggestion program.

- It must have strong follow-through. The U.S. Forest Service recently revamped their program. If management didn't respond to the idea within thirty days, it was automatically approved (as long as it wasn't an illegal act.)
- It must document ideas, not only for accountability but so that other ideas may be spawned as a result.
- It must be based upon intrinsic motivation. More modest rewards have been known to generate the most ideas. (145-147)

Freightliner Corporation's truck manufacturing plant in Cleveland, North Carolina places "cause and effect" boards throughout along with a supply of yellow and blue Post-it note pads. Employees are encouraged to fill out yellow notes indicating problems and others who have suggestions to solve the problem fill out a blue note (Nelson 167).

Bill Gates is quoted in Bob Nelson's publication, 1001 Ways to Energize Employees as saying, "How a company deals with mistakes suggests how well it will bring out the best ideas and talents of its people, and how effectively it will respond to change. When employees know that mistakes won't lead to retribution, it creates an atmosphere in which people are willing to come up with ideas and suggest changes" (168). Employees must know that they won't be penalized or ridiculed for taking risks. Those who are too timid to stand up in a meeting or

personally meet with management to discuss an idea should be given ample opportunities to make suggestions. And employees must have access to the information they need to make informed judgments. All workers should be included and their ideas should be solicited.

In my ideal office, the human environment will be a positively networked communal organization, with a strong team spirit. In order to fully understand their workers' job functions, managers will actually work employees' desks for one week. This will give them a fresh perspective and provide them with empathy when workers are suffering burnout and stress. It will also give them enough understanding of the work flow to recognize the need for improvement. It is too easy for management to criticize employees when they have never performed the job.

My company moved to a theoretically paperless system two years ago. I was involved in the transition and was excited to be a part of it. Many employees were fearful that they wouldn't be able to use the new system. Many of them didn't even know how to type on a keyboard, much less use a "mouse." During the training period, management sought input from employees, which they conveyed to the programmers.

Enthusiasm began to wane when we went "live" with the program. The letter generator program was cumbersome and it was impossible to view a claimant's address screen along with any other screen. The letters that had been entered into "letter generator" contained spelling and grammatical errors, and

often contained information that was not necessary or even practical. Several months into the program, those who were in charge quit soliciting feedback, and actually became hostile when suggestions were given. Employees were told to "live with it." However, some suggestions that were given could have easily been implemented. And employees were willing to assist with implementation.

But the old school prevailed. Suggestions were discouraged. None of the supervisors ever worked claims under the new system and couldn't understand the need for change. If they had been required to actually work claims under the paperless system, they would have gained an entirely new understanding.

For one thing, the company that sold the system promised an increase in productivity. However, many of the new procedures actually took *more* time than under the old system. Several people left the company and there were some major illnesses (probably a result of stress) resulting in a reduced work force. New hires were not brought in as the company felt that each employee should be able to handle higher work loads due to the "efficiency" of the new system.

For example, I found that one of the letters in "letter generator" was poorly worded. I made a suggestion that one counterproductive paragraph be removed and replaced by one that was more effective. Each time I would use the letter, I would have to delete that paragraph and manually type in the correct one. Although this only took a short amount of time, it added up quickly with claim volume and had become cumbersome. And, since I was the only one that regularly used this form letter, it would not impact other workers to make the change.

Moreover, it would have taken someone five minutes to change the letter. Or the company could have given me access to the program and I could have made the change myself. Instead, I was told not to make any more suggestions for letter generator. The reason given was that the system was designed to be very generic and used by many people and individual changes could be made when necessary. This would have made sense only if this particular letter was used by others. Even though that was not the case, rigidity of thought prevailed.

My ideal company will discourage this type of rigid thinking. Only those who have leadership skills will be promoted to supervisors. Technical knowledge isn't enough. Those who wish to train for a supervisory position will be given an opportunity to attend management training programs. Supervisors will be evaluated by their people just as workers receive performance evaluations. Supervisors who receive marginal reviews will be provided with training to improve their management skills.

The office will have training specialists, with a background in teaching or training and will allow employees with expertise in each area to assist in training others. For example, many inside claim representatives don't know how to write an auto repair estimate, but they are often required to review an estimate for accuracy. Most claims offices now have appraisers to inspect the damage and claim representatives, also known as "adjusters" to evaluate and pay the claim.

Outside appraisers could conduct training sessions, showing how to inspect a vehicle for damage and how an estimate is prepared. Communication between

adjusters and appraisers would be improved, and the appraisers would feel a sense of value and importance.

Likewise, agents could be brought in to view the claim facilities so that they would have a better understanding of the claims process. This would better enable them to service customers by providing appropriate coverages. For example, many policyholders are dismayed to discover that they don't have "rental reimbursement" coverage. This is an inexpensive coverage which can make the claims process much less disruptive to their lives when an incident occurs that disables their vehicle. Another example would be that agents would see why it's important that they inspect vehicles that they insure whenever possible. This would eliminate a substantial amount of fraud, which costs all policyholders more and hurts the agents' profit.

I would propose a position of "communications specialist." This would be someone with experience in several different areas of the insurance business as well as a background in training. This individual would be responsible for planning and organizing training and communications meetings and events and would also be in charge of training new hires as well as continuing education for seasoned personnel. They would travel to other departments or branch offices and be in charge of publication of various newsletters. They could also organize special events to improve employee morale and administer the suggestion program.

Mary Kay Ash says that if you help others get what they want, you will eventually get what you want. An environment that is based upon the Golden Rule

in an organization that develops their organization by using the talent within will prosper. She says, "Good people need opportunities and challenges. That's what causes excitement and keeps a company humming at a fast pace" (Ash 176).

If an organization can truly say that management as well as employees rise each day refreshed and eager to tackle interesting problems, that company will be a success.

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