The Integration of Wellness in the Environment and the Workplace

a case study of

ITT Aerospace/Communications Division, Fort Wayne, Indiana
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Fifth Year Landscape Architecture Thesis Project
Ball State University, Muncie, Indiana
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"How many times it thundered before Franklin took the hint? How many apples fell on Newton's head before he took the hint? Nature is always hinting at us. It hints over and over again. And, sometimes, suddenly, we take the hint."

-Robert Frost
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INTRODUCTION

The American lifestyle is becoming a serious problem today. We allow ourselves to be bused and trucked, elevated and escalated, and wonder why we grow obese and are out of shape. Because of unhealthy lifestyles, many people miss out on how much of the health, growth, joy, and contentment they are capable of experiencing, and they will die two to ten years before their time. In a single year, diseases of the heart and blood vessels kill far more Americans than were killed in World War I and II, the Korean War, and the Vietnam War combined (Robbins, Powers, Burgess, 1989, p. 12). By incorporating wellness factors in the discipline of landscape architecture, individuals can slow down the aging process and begin to experience feelings of high self-esteem, commitment to excellence, positive health, productivity, and a zest for living. Living in this manner exemplifies a richer way to be alive.

The environment plays an integral part when it comes to our health. Whether it's walking through a park, or just sitting on a bench, it's the environment that deals with the psychological well-being of the mind. Wellness is more than just being healthy, though. It's a state of being in tune with oneself, both mind and body. Sherman R. Dickman states, "The wellness approach to the human condition embodies a holistic view to humans" (Dickman, 1988, p. 8). It suggests that we must understand ourselves and become aware of how nature can be used as a tool to a healthier life. The six dimensions of wellness - physical, emotional, occupational, spiritual, social, and intellectual - can be incorporated into the
design process to create an ideal space. This incorporation will enable people to experience nature in a way that will benefit both their mind and body.

The landscape architect is in a position to play a valuable role in the future of our lives. He must begin to consider wellness issues as an integral part of the design process and to incorporate them into design solutions. Landscape architects are licensed to protect the health and safety of humans, yet beyond the involvement in the design of play parks and recreational facilities, the issue of health has remained outside of the formal integration into design solutions. However, the fact remains that every design solution holds the opportunity to address one or more of the six dimensions of wellness.

The purpose of the comprehensive project was to suggest, especially to landscape architects, ways to promote clients' and site users' wellness capabilities through design and identification of outdoor experiences. This project will provide landscape architects with a body of knowledge about the wellness movement and will hopefully make them become more responsive to design solutions which address the many issues related to wellness.
PROBLEM STATEMENT

This design project proposed to stress the importance of the environment and the role it plays in the public's health and well-being through the integration of the six dimensions of wellness.

GOALS AND OBJECTIVES

The goals and objectives for this project were:

* To provide knowledge of how wellness can be incorporated in the design process through a large spectrum.
* To develop a set of guidelines dealing with the six dimensions of wellness and their relation to landscape architecture.
* To demonstrate solutions to implement sensitive relationships between the environment and the concept of wellness.
* To apply research and develop a case study on a particular site.
* To develop ways to use and interact with the environment to encourage health.
* To develop a way in which to manipulate the environment to promote health with the integration of a walking trail.
Chapter 1

WHAT IS WELLNESS?

"Wellness is a lifestyle approach to personal excellence. It is a deliberate, conscious decision to pursue optimal well-being. It encompasses the body, mind, and spirit. It is a positive choice, pursued because it is judged to be a richer way to be alive" (Ardell, 1989, p. 33).

Many people believe wellness is just being physically fit, or that being well means keeping free from disease and sickness. What people do not understand is that wellness encompasses much more than just dealing with one's body. The term "wellness" has many meanings which are combined as one to create total wellness capabilities for every individual. John W. Travis explains the meanings of wellness in his book The Wellness Workbook, in the following manner:

* Wellness is a choice - a decision you make to move toward optimal health.
* Wellness is a way of life - a lifestyle you design to achieve your highest potential for well-being.
* Wellness is a process - a developing awareness that there is no end point, but that health and happiness are possible in each moment, here and now.
* Wellness is an efficient channelling of energy - energy received from the environment, transformed within you, and sent on to affect the world outside.
* Wellness is the integration of body, mind, and spirit - The
appreciation that everything you do, and think, and feel, and believe has an impact on your state of health.

* Wellness is the loving acceptance of yourself (1988, p. XIV).

Swinford provides an expanded version of the concept of wellness. She focuses on the environment and wholeness as playing a unique role in affecting individual health. In her book Promoting Wellness, she explains wellness with an emphasis on the environment and wholeness both playing major roles in individual’s health. She states, "Wellness is one's potential for wholeness and well-being. It is a variable state that is strongly influenced by personal choices and environmental factors" (Swinford, 1989, p. 5). Swinford considers wellness as being "at your best" regardless of the circumstances in life. Wellness enables the possibility for all persons who are self-responsible and who have a personal commitment to being the best they can be.

Naturally, achieving wellness is unique to age, resources, and circumstances. What is meant is that high-level wellness is suitable for all ages young and old, poor and wealthy, and able-bodied and disabled persons. It involves readjusting one’s lifestyle to deliberate choices and being responsible for oneself. Living a wellness lifestyle requires a continuous effort to reach full potential - a process of gaining control of oneself and one’s environment. Wellness also requires the acceptance in the changes in life while seeking the positive rewards from it. The outcome from these changes include high self-esteem, commitment to excellence, positive health, productivity, and a zest for living.
Living a wellness lifestyle has the potential to increase the quality of one's existence on earth (Robbins, Powers, Burgess, 1989, pp. 9-10).

Wellness is a unique and highly individualized experience for each person. The physical make-up, life circumstances, and historical and personal choices of the individual will strongly influence an individual's potential for high-level wellness. Even when a person achieves a state of high-level wellness, that person may have the potential to pursue an even higher state of wholeness and well-being (Swinford, 1989, pp. 5-6).

A wellness lifestyle is the process of working toward that ultimate state of wholeness and well-being. It is a deliberate, planned approach to life that requires personal commitment and a sense of self-responsibility. It means making choices about what to expose oneself to and how to care for oneself. Thus, the process requires a strategic plan in the self-responsibility, nutritional, physical-fitness, environmental, and psychological/spiritual/social dimensions of one's lifestyle (Swinford, 1989, pp. 5-6).

Total wellness is achieved, not only with a strategic plan of one's lifestyle, but also by certain principles associated with wellness. The first of these includes the pursuit of a conscious objective. It does not occur automatically with most people, and unless it is set up as a desirable objective, it cannot affect behavior in a consistent manner. Wellness should always be considered an attitude, a response to living (Dickman, 1989, pp. 2-3).

A second principle concerns the development of a sense of humor. Seeing one's activities as a whole is a frequent trait of a
well person. These people are often socially active and do not let
the state of the world get them down (Dickman, 1989, pp.2-3).

The third principle is perhaps the most important. Wellness,
as suggested by Travis, is on-going, never a static state. A person
does not achieve it and then relax, it must be renewed each day.
Because wellness depends on awareness of self, and awareness is
constantly being interrupted by work; by concentration on almost
anything but oneself, and by interpersonal relations, it frequently
happens that when awareness returns, wellness has subsided. To
regain wellness requires introspection and analysis of attitudes and
actions that may have been responsible for losing it (Dickman,
1989, pp.2-3).
WELLNESS is a choice - a decision you make to move toward optimal health.

Physical Wellness
Wellness is a state of being in which one can actualize their God-given potential. It is the state of being healthy in all areas of life.

Spiritual Wellness
The wellness is the presence and presence of human existence, an appreciation of nature and ideas.

Emotional Wellness
An awareness and acceptance of a wide range of feelings and emotions. It encompasses one's personal understanding of oneself and others.

Social Wellness
Wellness is the feeling of being part of a community. It is the feeling of belonging, the feeling of being loved, the feeling of being connected.

Intellectual Wellness
Wellness is the ability to learn, develop, and apply knowledge to improve oneself and society.

Occupational Wellness
Wellness is the ability to work, to have meaningful work, and to enjoy the process of work.

Illness/Wellness Continuum
Moving from the illness to the wellness is a progressive improvement of health. Moving from the wellness to the illness is a progressive deterioration of health. The continuum model helps you to be mindful of your current state and the steps you need to take to move forward or to prevent regression.

Wellness Description for:
ITT Aerospace/Optical Division

Robert Odynski
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Ball State University
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Chapter 2

THE DIMENSIONS OF WELLNESS

The wellness lifestyle is a coordinated and integrated living pattern involving six dimensions: physical, intellectual, emotional, social, spiritual, and occupational. There is a strong interdependence between dimensions, even though they function separately. The combination of these six dimensions equals total health for an individual. In order to understand these dimensions more clearly, let's first define each and explain how they can be implemented (Robbins, Powers, Burgess, 1989, p. 11).

Physical Dimension

The physical dimension deals with the functional operation of the body. It involves the components of physical fitness - muscular strength, muscular endurance, cardiorespiratory endurance, flexibility, and body composition. Dietary habits have a significant effect on physical well-being. One's sexual, drinking, and drug behaviors also play a role in physical health. The physical dimensions also includes medical self-care, regular self-tests, checkups, proper use of medications, taking necessary steps when ill, and appropriate use of the medical system. Managing the environment also affects a persons physical well-being (Robbins, Powers, Burgess, 1989, p.11).

People seeking physical wellness enjoy many benefits. They put their bodies through strenuous exercise and choose not to eat what many of us find to be irresistibly appealing because they have
discovered that their lives are more fulfilling now with regular exercise and better eating habits. Their hearts are more efficient. They have more energy, and they have less of a chance of suffering from disease linked to contemporary eating habits (Ryan, 1986).

Intellectual Dimension

The intellectual dimension involves the use of the mind. Maintaining an active mind contributes to total well-being. Intellectual growth is not restricted to formal education, that is, education received in schools. It means a continuous gaining of knowledge throughout life. It involves engaging one's mind in creative and stimulating mental activities. Curiosity and learning should never stop. Reading, writing, and keeping in tune with current events are intellectual pursuits. Being able to think critically and apply knowledge are also associated with this dimension. The link between the brain and healthy living is undeniable (Robbins, Powers, Burgess, 1989, pp. 11-12).

Emotional Dimension

Having a positive mental state is directly linked to wellness. Emotional wellness includes three areas: awareness, acceptance, and management. Emotional awareness involves recognizing personal feelings, as well as the feelings of others. Emotional acceptance means understanding the normalcy of human emotion, in addition to realistically assessing your own personal abilities and limitations. Emotional management means the ability to control or cope with personal feelings. The ability to maintain emotional
stability at some midrange between the highs and the lows is essential. The abilities to laugh, to enjoy life, to adjust to change, to cope with stress, and to maintain intimate relationships are examples of the emotional dimension of wellness (Robbins, Powers, Burgess, 1989, p. 12).

Social Dimension

Social wellness involves the ability to get along with others, as well as appreciating the differences in people. It means showing fairness, justice, and concern for the welfare of one's community and individuals around them. The social dimension of wellness also includes concern for the environment and for mankind as a whole. Good friends, close family ties, and trusting relationships go hand in hand with high-level wellness (Robbins, Powers, Burgess, 1989, p. 12).

Spiritual Dimension

Because of its predictable nature, the spiritual dimension is often slighted or overlooked. It is in fact a very difficult dimension to work with objectively, in part because of the wide variations among people's values and beliefs (Swinford, 1989, p. 261).

Spiritual wellness is not directly related to religion. The spiritual dimension does not identify a creator, a god, or a theology. Instead, it involves the development of the inner self and one's soul (Robbins, Powers, Burgess, 1989, p. 12). It supplies a foundation of meaning to life and gives a sense of control over one's destiny (Swinford, 1989). Spiritual wellness is a way of living that views
life as purposeful and pleasurable, and seeks out life-sustaining and life-enriching options, which are freely chosen at every opportunity. Spiritual wellness involves experiencing life and reflecting on that experience in order to discover a personal meaning and purpose in life. It gives one an inner strength and resourcefulness. Being able to identify the true sources of joy, pleasure, and fulfillment in your life is the spiritual clarification of personal values and beliefs (Robbins, Powers, Burgess, 1989, p. 12).

In addition, the spiritual dimension serves the vital function of bridging that unknown territory beyond life and death. It guides us in seeking answers to ultimate questions about the meaning of life, illness, and death. In short, it defines one's relationship with self, with others, and with a superior being or power (Swinford, 1989).

Occupational Dimension

The occupational dimension involves developing personal satisfaction from a particular vocation. Much of a person's life will be spent at work. Therefore, it is important that a chosen career provide the internal and external rewards valued by each individual. Occupational wellness involves maintaining a satisfying balance between work time and leisure time. It involves a work environment that minimizes stress and exposure to physical health hazards. If you are not happy with your occupation, you will find that your entire well-being suffers (Robbins, Powers, Burgess, 1989, p. 13).

Wellness is a combination of all six dimensions. It means striving for growth in each dimension. Neglecting any dimension
destroys the balance critical to high-level wellness. Certain
dimensions may take on a greater importance at different times
throughout a persons life. Nevertheless, striving for balance
contributes to wholeness. Growth in wellness involves making
positive choices that will benefit each individual (Robbins,
Implementations of Dimensions of Wellness

The following implementations for the Dimensions of Wellness were taken directly from the book, The Wellness Way of Life (Robbins, Powers, Burgess, 1989, p. 11-12). These implementations allow for a more thorough explanation of how one can apply each dimension to his own lifestyle.

Physical
1. Eliminate smoking.
2. Reduce consumption of cigarettes.
3. Eat a balanced diet.
4. Lose weight (lower cholesterol/triglycerides in blood).
5. Increase rest or sleep time.
6. Decrease use of alcoholic beverages.
7. Eliminate alcoholic beverages.
8. Improve dental or personal hygiene.
9. Eliminate use of all drugs.
10. Improve cardiovascular fitness.
11. Improve muscle strength.

Intellectual
1. Improve reading skills (read a book a week).
2. Increase concentration while studying.
3. Attend special lectures and programs when available.
4. Decrease amount of time watching television.
5. Develop a routine for study or reading.
6. Add a vocabulary word every day.
7. Watch more educational or scientific programs on television.
8. Read the front page of the newspaper every day.
Emotional
1. Learn to recognize your feelings and express them.
2. Find an alternative to hurting others when you are angry.
3. Accept compliments or praise graciously.
4. Recognize and accept personal shortcomings.
5. Deal appropriately with feelings toward the opposite sex.
6. Seek professional help with serious adjustment problems.
7. Relieve tension and stress with appropriate relaxation and/or leisure activities.
8. Identify coping devices and ego defense mechanisms used in adapting to stress.

Spiritual
1. Set some time each day for meditation, thought, and/or prayer.
2. Enter a value-oriented, spiritual, or religious discussion.
3. Attend a spiritual or religious meeting.
4. Read a spiritual book.
5. Join a group which is intended to expand consciousness.
6. Select a highly valued personal characteristic (such as patience, forgiveness, or compassion) and make a concerted effort to more fully develop that characteristic.
7. Identify your weakest personal characteristic and improve on it.
8. Assess your value system in an effort to become reaquainted with yourself.
9. Be willing to state your value judgments among others.
10. Be more accepting of values expressed by others that are inconsistent with your own.
11. Make an effort to identify your values regarding controversial contemporary issue.

Social
1. Display more affection toward loved ones.
2. Be less critical of friends or loved ones.
3. Express your feelings so that others will know how you feel.
4. Overcome a fear of talking with individuals of another race, opposite sex, or persons in authority.
5. Be more consistent in fulfilling responsibilities to others.
6. Communicate more efficiently with your family and close friends.
Occupational
1. Identify what it is that you really want to do, and what you do best.
2. Take classes to develop new skills for vocational enhancement.
3. Identify your weakest work-related skill, and work to improve it.
4. Take advantage of/or initiate a wellness program at your workplace (health screening, employee trip, softball team, picnic, stress management workshops, etc.).
5. Identify a wellness -"robbing" aspect of your work environment, and pursue a means to change it.
6. Get to know peer workers better. Plan a social get-together.
7. Compliment management/labor in some way, and offer your help to them.
8. Place a wellness-oriented sign, motto, poem at your work station.
Chapter 3

WELLNESS IN THE ENVIRONMENT

A definition of environment begins to explain its relationship to wellness. Environment is defined in the following ways:

Environment: 1: the circumstances, objects, or conditions by which one is surrounded 2: a. the complex of physical, chemical and biotic factors (as climate, soil, and living things) that act upon an organism or an ecological community and ultimately determine its form and survival  b. the aggregate of social and cultural conditions that influence the life of an individual or community (Webster, 1985).

Focusing on the latter part of Webster's definition, one can easily conclude that the environment includes all things that touch and produce change in living and nonliving things. Our environment influences the way we live, the way we think, the way we feel, and the way we interact with others. The environment can enhance well-being and encourage harmony and inner peace; or it can distract, and produce disharmony which can result in death. It is possible to structure our environment creatively and wisely so that balance is achieved. Ways in which this can be set forth are by increasing awareness and sensitivity to environmental effects and by choosing lifestyle behaviors which will enhance personal wellness (Swinford, 1989, p. 185).

Our environment exists both internally and externally, and it is immediate as well as global. Our immediate environment consists of its sensory components of sound, space, color, and light. In our
internal environment, we become sensitive by knowing our inner selves (Swinford, 1989, p. 185).

Environmental factors can also cause negative health effects for individuals seeking total wellness. It is up to each individual to become aware of how these factors can affect health and how one can avoid them.

There are basically two types of environmental factors that influence a person's health. One type includes those over which people can exert personal control if they choose. What and how much one eats and drinks, whether or not one smokes, are examples of this type. Personal habits have been shown to affect susceptibility to chronic diseases like atherosclerosis, hypertension, mid-onset diabetes, and cancer. Because of this relationship, these diseases have become known as the lifestyle diseases because so many of the contributing factors are under an individual's control (Dickman, 1989).
CHAPTER 4

SITE HISTORY

After having reviewed and documented the many aspects wellness has to offer individuals, I began to search for a site in which I could incorporate an existing environment with wellness issues together and unite them as one. Dr. Neil Schmottlach, Director of the Wellness Institute, Ball State University, directed me with four possible sites located in the Fort Wayne, Indiana area. The site which best pertained to my comprehensive project needs was the ITT Aerospace Communications Division, Fort Wayne, Indiana. The ITT Aerospace Communications Division produces instruments for satellites in outer space. These instruments are affixed with mirrors located in them which scan the earth and deflect different wavelengths of light into detectors which are also located within the instrument. These detectors generate electrical signals which are transmitted down to the earth and are used to construct weather information maps. ITT also produces data communications equipment for the Department of Defense. After having visited the site and talking with several personnel, I was given permission to develop site plans as a case study for the thesis project.

The ITT Aerospace Communications Division site is located just east of I-69 on the corner of Cook and Lima roads in Fort Wayne, Indiana. Once a productive farm, raising corn, beans, and wheat, the land was sold to ITT in 1986 by the land owner Mr.
Soloman. The barns and house still occupy a small portion of the site. Woodland areas still remain on the upper portion of the site. Construction of the first building began in April, 1987. Since then, three additional buildings have been constructed with a fifth planned in the future. These buildings are the main headquarters of ITT in Fort Wayne housing most of the technical and administrative offices. The total work force employed at ITT is approximately 2500 employees.

Base maps and other information were made available by John Goodman, manager, facilities, communications, and building development, that would allow me to continue with the case study. The next step in the research process was the development of a site inventory and site analysis. Upon the completion of the analysis, several concepts will be developed to demonstrate several alternative ideas for the case study.
Chapter 5

Site Inventory and Analysis

The site inventory and analysis began with a site visit, (Figures 1 & 2). Notes were made of the prominent features with the most potential for the integration of wellness issues to occur. From observations taken, the east and southeastern portions of the site, which contained the existing farm, had little potential due to certain restrictions made by the company personnel and Lima road, which is also called Route 3, a four lane highway. Moving down to the southern portion of the site, I again felt restricted due to limitations set by future construction. The existing mound near the detention area, located on the southwestern portion of the site, would be used for future construction, therefore limiting the area for development. The remaining features on the site included a detention area and two existing woodland areas.

The detention area, as it exists, is a vast barren piece of land with no immediate vegetation. The soils are continually moist with some areas holding a few inches of water. This area has great potential for quiet and educational areas to be developed, as well as the attraction of wildlife. The location of the detention area enables noise to be blocked from the main building and Lima road. This allows employees of ITT to enjoy the area during the lunch hour and experience the many possibilities wellness has to offer. Plant screening and plant massing would allow certain areas to become more secluded and private than others.

The existing woodland, located on the northwestern portion of
the site, begins to show evidence of an awareness of education. Tree identification stations throughout the woods allow employees to learn about nature. A swale, holding a few inches of water, runs through a portion of the woods. This water drains into a nearby pond which is adjacent to the site. The existing woodland contains many old native trees such as cottonwoods, oaks, and elms. With the dense vegetation, the woodland area holds potential for quiet meditational areas as well as educational areas. Employees can use the area in the woods to learn about nature by observing wildlife such as squirrels, birds, and other animals. They can also touch, smell, or even taste the many wildflowers and trees which inhabit the area. This allows for a better understanding of the natural environment which surrounds us. Benches made from split tree trunks are existing in the woodland area to allow employees to relax and sit to enjoy the beauty which surrounds them.

Another existing woodland is located due north of the ITT building. This woodland is encased by Cook road, the entrance onto the site, the executive parking lot, and a small section of Lima road. The woodland area again holds the potential for educational areas and perhaps social gathering spaces. Due to the openness of the area, quiet and meditational areas are not as prominent as in the adjacent woodland area. This area also contains a large variety of native trees (such as cottonwoods, oaks, and elms). Tree identification has begun to take place in the area as well as the placement of benches. With the awareness of employee's needs having begun in the woodland areas, further development can only expand the desire for retreating to these areas.
(Figure 2) Site Analysis
Chapter 6

Conceptual Diagram

The integration of the six dimensions onto the existing site of ITT called for the development of a conceptual diagram, (Figure 3). This diagram shows which areas on the site has the greatest potential for the integration of wellness dimensions, and it begins to show relationships among them.

The spiritual and emotional dimensions both deal with the reassessment of one's values, beliefs, and personal feelings. This involves a single individual taking time away from others to reflect. Because of this relationship, the two dimensions are best suited together and should be placed in close proximity to each other. From the site analysis, a good location for these two dimensions would be in the detention area and lower portion of the northeastern woodland area. The detention area is located away from the noise of heavy traffic and the ITT building. This allows employees to experience quiet and peaceful areas to retreat to during lunch breaks.

The intellectual, social, and physical dimensions require less seclusion and more interaction to existing features. These three dimensions can be performed at most locations on the site, not only in non secluded areas. Conclusions drawn from the site analysis give justification for the placement of the intellectual, social, and physical dimensions of wellness.

Finally, the occupational dimension perhaps is the most difficult dimension to integrate into the existing environment because it deals with one's occupation and work. Aside from
utilizing this occupation inside the ITT facility, one can possibly retreat to a quiet area and reflect on work habits or ways to improve work productivity.
(Figure 3) Conceptual Diagram
Concept Explanation

The development of three different concepts began to unfold from the study of the conceptual diagram. Providing three alternative concepts to integrate a walking/parcours trail and the six dimensions together became challenging. For the most part, the dimensions occur repeatedly at the same locations throughout the concepts. The only noted difference in the concepts is the design of the walking/parcours trail.

Concept 1

Concept 1 begins with a predictable design solution (Figure 4). The walking/parcours trail is laid out starting at the main entry going around the perimeter of the existing asphalt parking lot and running through both woodlots, ending at the back entry. This solution allows site users approximately a one mile direct route from a designated beginning point on the site to a finishing point. Near the water holding detention area, site users are provided with an alternative route. This route allows employees to partake in the spiritual, intellectual, and emotional dimension of wellness. The detention area becomes an educational observatory surrounded by pines and a variety of canopy trees which will enclose different private spaces. The floor of the detention area becomes a carpet of reeds, wild grasses, and an array of wildflowers to allow color for the eyes, scents for the nose, and texture for the touch. The educational observatory area also becomes a habitat for wildlife to
enjoy the newly created environment.

As one exits the detention area, a transitional space is provided as a link from the newly created educational observatory to the existing natural woodland. Here a variety of stations are provided to allow one to become active by using a non strenuous fitness station. Also, along the natural walking trail, benches, like the existing ones, will be placed in such a manner to allow for privacy. Tree identification stations, as well as wild flower and wildlife marks, will be placed throughout the woodland for educational purposes. This portion of the woodland area is designed to facilitate all of the six dimensions of wellness.

As one journeys across the pedestrian crossway provided on the main entry road, another great woodland area comes into view. This area also provides fitness stations for employees' needs. Identification stations will be placed throughout the course of the walking trail to allow for learning experiences from what nature has provided. The trail is completed as one comes closer to the back entry.

The walking/parcours trail is designed with 15 stations throughout the journey, (Refer to Chapter 8 for details). These stations range apart in distance from 300 to 400 feet. Though physical activity will be the main emphasis on the trail, mental stimulation stations will also be provided in the quieter, secluded areas on the site. These stations are designed to exercise one's mind with thoughts of inspiration and philosophy.
Concept 2

Concept 2, (Figure 5), was designed to exclude the interaction with Lima road and visibility to the parking lot. The trail became more nature oriented in that it is looped only in the woodland areas and water holding detention area. The starting point of the trail occurs again at the main entry from the building. Instead of allowing one to walk around the perimeter of the parking lot, the trail darts one off into the woodland area immediately. Allowing two options, the trail meanders toward the water holding detention area or into the wooded areas.

The detention area was designed to become a small wooded educational area. Plant screening and plant massing become an important issue to create somewhat secluded spaces. These spaces allow employees to experience areas for meditation and education. Masses of pines in the area create secluded spaces and allow one to stray away from the walking trail and read a passage that is provided as part of one of the many mental stimulation stations. As in concept 1, the same treatment to the detention floor is duplicated. This newly created environment houses reeds, wild native grasses, and wildflowers which will attract a variety of wildlife species.

The wooded areas reflect many of the same ideas as in concept 1. Since the concept of the trail is designed to draw attention to the natural features on the site, existing features are stressed and highlighted. The stations provided throughout the woodland area allow interaction among fellow employees. For those who have with less desire to use the stations, benches located along and away from
the trail allow social interaction as well as possibilities for meditation.
(Figure 5) Concept 2
Concept 3

Concept 3, (Figure 6), begins to consider future development on the site as well as the possibility of allowing for a 3 - 3 1/2 mile trail throughout the site. The trail begins at the entry of the building allowing two possible directions one can take. The first route allows one to walk the perimeter of the parking lot to experience the entire site. Signage, which introduces the wellness concept in the environment, designates the beginning of the fitness stations. Pine screening along the trail provides screening and privacy for employees. For employee safety, a pedestrian crossway is provided across the proposed new entrance. This entrance allows for better circulation among vehicles traveling to and from work. The future building will be located in the general vicinity of the southeastern portion of the site.

The trail continues past the future building into the water holding detention area. This area is filled with additional native trees which provide a ceiling throughout the space. Partial pine screening allows views of the parking lot and building to be screened providing meditational areas and social gathering spaces. The floor of the water holding detention area is transformed into a carpet of reeds, native wild grasses, and a variety of wildflowers. Shrub masses throughout the area provide further screening and aesthetic values. Spaces created to the side of the trail allow one to experience mental stimulation stations. These stations benefit employees by allowing the possibility of reducing stress and allowing them to relax and challenge the mind.

The trail proceeds toward the woodland areas. A transitional
space allows one to prepare for the fitness stations and the woodland areas ahead. The trail is looped in the woods to allow interaction to occur among employees. Private spaces are also included in the woodland area to allow one to exercise the spiritual and emotional dimensions of wellness. Throughout the woodland areas, tree identification stations are placed to allow one to learn about nature and all it has to offer. Native shrub masses along the edge of the woodland area add seclusion as well as attracting wildlife to feed on the edible fruit produced by the shrubs. The end of the trail comes as one approaches the executive entry.
Concept 3 for: The Ultimate Trail

(Figure 6) Concept 3
Summary of Concepts

The three concepts that have just been explained allow variations in trail distance and trail experiences. The thought behind Concept 1 is to provide a predictable solution in allowing employees a fast way to experience the existing site. Concept 2 encourages interaction with the natural features on the site. The trail system loops around from the detention area to the woodland area. Concept 3 provides a solution to respond to future development on the site. This concept allows an alternative of either experiencing the entire site or just discovering the natural features the site offers. Each of the three concepts has been designed to incorporate the six dimensions of wellness into the existing environment.
Chapter 8

Fitness and Mental Stimulation Stations

As stated earlier, each concept has a total of 15 stations throughout the site. These stations are designed to exercise both the mind and body in order to achieve high level wellness. Due to certain restrictions from company personnel, eliminating high strenuous workout stations, non strenuous stations became the solution to the problem. A total of nine fitness stations are provided along with six mental stimulation stations. Each station is approximately 300 to 400 feet apart to allow for a rest period before approaching the next station. The mental stimulation stations, located primarily in the water holding detention area and woodland areas, will be located in relatively close in distance. All exercise stations will be located to the side of the walking trail so they will not interfere with other participants. Each station will allow three different repetitions to facilitate the beginner, intermediate, and advanced person. The repetitions would work as follows:

5 times for beginner
10 times for intermediates
15 times for advanced
Signs will be provided by each station introducing the exercise and explaining how the exercise is performed. An example is as follows:

Step - ups
Step up onto log with right leg; follow with left. Step down with right leg; follow with left. This is one count.
Repetitions: 10 - 15 - 20 times.

Sample stations that can be used on the site are as follows, (Figures 7 thru 13):

(Figure 7) Slant board
(Figure 8) Shoulder/Quad stretch

(Figure 9) Squat stretch
(Figure 10) Chin up/Isometric

(Figure 11) Step up
(Figure 12) Balance walk

(Figure 13) Back/Side stretch
The mental stimulation stations require exercising the mind. To provide a variety of inspirational passages, these stations should be changed monthly. An example of the type of passage would be as follows:

When water is scooped by the hands,  
the moon is reflected in them;  
When flowers are handled,  
the scent soaks into the robe (Geba, 1985. p.27).

Following each passage, explanations of the meanings will be provided.
Chapter 9

Conclusion

The success of the integration of the six dimensions of wellness into the environment, depends on how it is accepted by the users. The environment may hold the opportunities for one to benefit from, but if the user is not educated on the many aspects of wellness, the rewards gained towards one's health and well-being, and how the environment can affect one's health, then the newly created space has failed. Education and awareness of one's lifestyle is the first step to a healthier life.

The environment plays an integral part when it comes to our health. The air we breath, the odors we smell, and the color that we see, affect our attitude toward our lives. It is up to the landscape architect to change how we perceive the environment by integrating the physical, emotional, occupational, spiritual, social, and intellectual dimensions of wellness into the land.

Using the ITT Aerospace/Communications Division site for a case study, allowed the integration of wellness to occur in the existing environment. The natural surroundings that graced the site became transformed into areas for meditation, social gatherings, and physical activity. This integration of wellness can be done not only in the corporate environment, but in any environment that allows users to experience the world around them.
References


Advisors

Schmottlach, Neil, Dr.. Director of the Wellness Institute for Ball State University.

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Supplemental Bibliography


