A Safe and Welcoming Environment for All

Practicum in Human Services
Practicum in Human Services provides occupational specific training and focuses on the development of:

- Consumer Services
- Early Childhood Development and Services
- Counseling and Mental Health Services
- Family and Community Services
- Personal Care Services

The physical aspects and safety of a workplace environment can have a direct impact on the productivity, health and safety, comfort, concentration, job satisfaction and morale of the people within it.
Evaluating the Work Environment

Important factors in the work environment that should be considered include:

- air quality
- building design and age
- furniture and equipment
- furniture design and quality
- lighting
- noise
- radiation
- space
- temperature
- transportation
- ventilation
- vibration
- workplace layout
- workstation set-up
Why should we evaluate the workplace environment?

When people are working in situations that suit their physical and mental abilities, the correct fit between the person and the work task is accomplished. People are then in the optimum situation for learning, working and achieving, without adverse health consequences such as an injury or illness.

What work environment factors should be assessed?

When assessing the workplace environment, consideration should be given to individual human characteristics such as age, sex, experience, physical stature and how well these human characteristics match the physical environment. Appropriate design of workplace environments will ensure that they accommodate a broad variety of human characteristics. Are there adequate parking facilities for both employers and clients? Handicapped parking spaces? Security for parking lot areas?

Who is responsible for assessing the work environment?

Each employee should be conscious of their health in their work environment and record any pain, discomfort, injury or illness that they believe is work-related. This information should be reported to supervisors as soon as possible to allow appropriate corrective action to reduce the risk to health and safety to be taken.
Evaluating, Identifying and Assessing the Work Environment

If a hazard is determined to be a risk (based on likelihood of occurrence and severity of consequences), it is advisable to provide time, money and personnel resources to help prevent or minimize the risks.

A determination then needs to be made whether the employee and/or supervisor can assess the situation with the available information, or whether information and advice needs to be sought from upper management.

How do we evaluate the workplace environment?
The risk management process is used to evaluate the workplace environment. This involves:
• identifying work environment hazards
• assessing the risk of injury/illness from these hazards
• implementing appropriate control measures to prevent or minimize the risks
• checking that the control strategies are effectively controlling the risks

To identify environmental hazards in your workplace, you can:
• consult with colleagues and supervisors about possible hazards
• walk through the work site and record any hazards
• analyze workplace incident, accident, injury and illness data
• consult with specialist practitioners, industry associations, unions and government bodies

In assessing the risks associated with the work environment, the following two factors should be considered:
• the likelihood of an incident, accident, injury or illness occurring because of the risk - a very high likelihood indicates controls may be necessary
• the severity of the consequences if an incident, accident, injury or illness occurred because of the risk - if there were many fatalities, this would constitute extremely severe consequences

If a hazard is determined to be a risk (based on likelihood of occurrence and severity of consequences), it is advisable to provide time, money and personnel resources to help prevent or minimize the risks.

The work environment should satisfy the physical and mental requirements of the people who work within it. The necessary adjustments to the work area, in terms of the heights and angles of furniture and equipment, should be made for the comfort and safety of each person.
The following environmental hazards may require consideration in a workplace:

- **Lighting**
  Lighting levels need to be appropriate to the task. Working in dim or over bright work environments can result in eyestrain, headaches, irritability and inevitably reduced productivity. Light sources, including the sun, can create unwanted reflections, glare and shadows in the workplace that can cause discomfort and distraction, and can interfere with the performance of visual tasks. Low levels of lighting can cause depression, which for some people may be severe.

- **Noise**
  Excessive exposure to loud noise can irreversibly damage the ear, resulting in noise-induced hearing loss. ‘Nuisance’ noise can be annoying and distracting and result in reduced job performance and satisfaction. Noise may also be unsafe if it impairs communication in the work environment, such as by overpowering auditory alarms.

- **Radiation**
  Exposure to ultraviolet radiation from the sun can induce potentially lethal skin cancers. Exposure to direct sun, particularly between the hours of eleven and two, can result in sunburn, headaches and fatigue. Different people have varying degrees of sensitivity to the sun such as fair freckled skin often burns more quickly than olive skin. Precautions for avoiding sun exposure should be followed diligently by everybody.

- **Ventilation, air quality and thermal comfort**
Presentation Notes
A Safe and Welcoming Environment for All

Ventilation is important for the control of dust, fumes, gases, aerosols, climate and thermal comfort factors. Exposure to different types of dust can result in fibrosis of the lung, allergic reactions and asthma attacks. Various vapors, gases and aerosols have the ability to cause respiratory and skin damage. Extremes of heat can reduce concentration and motivation and cause a number of heat-related illnesses. Extremes of heat can also reduce tolerance to chemical and noise exposure, and increase the risk of heart attacks.

- Vibration
  Whole body vibration such as from riding a mower, can affect comfort and performance even at low levels and can cause damage to the spine, stomach pain and gastrointestinal complaints. For example, hand-arm vibration, such as from hand tools, can have negative effects on muscles and the skeleton, and can contribute to carpal tunnel syndrome, low-back pain and vibration white finger.
Controlling the Risks

The risk associated with each hazard can be controlled by implementing the following hierarchy of controls:

- Administration adjustments
- Eliminating hazardous equipment
- Isolating hazards
- Providing protective gear
- Redesigning the workplace
- Substituting materials

The risk associated with each hazard can be controlled by implementing the following hierarchy of controls:

- administration - adjusting the time and conditions of an individual’s exposure to the risk such as rotating tasks so that employees do not spend too long in hot or cold conditions, or too long performing a strenuous manual task
- eliminating the risk from the workplace such as removing hazardous playground equipment
- isolating, closing off or guarding a particular hazard in the work environment such as keeping medicines in a locked cabinet
- providing personal protective equipment as a last resort, when higher-order controls are not practicable such as providing hearing protection, face shields and sunscreen for janitors/grounds persons using a string/line trimmer and lawn mowers
- redesigning the workplace layout to reduce risks such as rearranging furniture to allow easy access to materials and equipment
- substituting a material in the workplace environment with a less hazardous one such as purchasing non-hazardous cleaning equipment, or replacing slippery floors with non-slip flooring
The four main categories of physical characteristics that need to be considered in the work environment are:

- Arm reach, which has a bearing on storage of materials
- Clearance such as headroom, legroom, elbow-room, access
- Posture, which has a bearing on the location of materials/equipment, heights of working surfaces
- Strength

Physical environmental factors can have an adverse impact on people. The specific physical factors that limit performance will vary depending on both the work environment and individual differences. Those people who are working within an environment are the ones best able to identify factors that affect their work. It is important to involve these ‘hands-on’ people in consultations with supervisors, managers and occupational health and safety personnel when considering options for controlling the risks in question.
Since the early 1980’s, computer workstations have become an integral part of America’s workforce. Millions of units are now in use and the numbers will continue to increase. The computer is comprised of a central processing unit, display monitor, keyboard and mouse. Components of the computer workstation may include the chair, desk, anti-glare screen, document holder, printer and any other equipment essential to working with computers.

An increased number of computer workstations in the work place has resulted in health concerns related to vision and body aches and pains. Problems associated with computer workstations are generally temporary and can often be solved using simple corrective measures. This guide briefly discusses these concerns and addresses administrative controls (i.e., proper computer set up, monitor positioning, rest breaks and project assignment) and engineering or ergonomic controls (furniture design, lighting, glare control, computer workstation configuration and layout).
Basic guidelines to follow in the design of the work area to enable the efficient management of tasks include:

- **frequency of use** - placing the most frequently used items within the easiest reach;
- **function** - materials and equipment with closely related functions should be grouped together;
- **importance** - placing the most important items in the most advantageous or accessible locations;
- **optimal positioning** - positioning materials and equipment to reduce physical hazards and increase usability such as placing a document holder in front of a person, if it is viewed more frequently than the monitor, eliminating glare on computer screens by positioning monitors parallel to light fittings and at right angles to windows;
- **sequence of use** - materials and equipment that are commonly used in sequence should be grouped together;
- **work/rest schedules** - work tasks should be varied to change body position and mental activities.
Ergonomics

For each task, the following should be considered:

• frequency and flow of work
• materials and equipment required
• the priority of different tasks

Ergonomics

Ergonomics is the study of the relationship between people, the equipment they use and the physical environment in which they work. Applying ergonomic principles to the design, modification and maintenance of workplace environments, has a benefit on people’s work performance and short- and long-term health and safety.

The work area should be set up according to ergonomic design principles.

For each task, the following should be considered:

• frequency and flow of work
• materials and equipment required
• the priority of different tasks
Workplace Ergonomics

Ergonomic basics that apply to virtually any workplace.
https://www.youtube.com/watch?v=QeDUCXfzl6U&feature=youtu.be
Ideally, an individual’s work environment is one in which the employee is comfortable and one that fosters high levels of creativity and productivity. Such environments can lead to feelings of self-fulfillment for employees and can increase revenue for the employer. However, sometimes work environments make employees feel uncomfortable rather than safe, creative or needed. Such work environments should be remedied so that employees can maintain their physical, mental and emotional health while on the job.

Even if the majority of the co-workers have no problem with the actions or comments, a work environment can be considered hostile if the actions or comments clearly make an employee uncomfortable in the workplace.

We are now going to focus on the following areas:

• Discrimination
• Diversity
• Non-threatening environment
• Sexual harassment
A hostile work environment is an environment in which an employee, due to actions by co-workers or the employer, does not feel comfortable performing duties. In extremely hostile work environments, the employee may not feel comfortable even coming into the work facility. Discrimination may contribute to the hostile work environment.

The various types of discrimination prohibited by the laws enforced by U.S. Equal Employment Opportunity Commission (EEOC) include:

- Age
- Disability
- Equal pay/compensation
- Genetic information
- Harassment
- National origin
- Pregnancy
- Race/color
- Religion
- Retaliation
- Sex
- Sexual harassment

For additional information on the types of discrimination, visit U.S. Equal Employment Opportunity Commission Types of discrimination.
http://www.eeoc.gov/laws/types/index.cfm

Teacher note: You may opt to assign the types of discrimination to the students as a research project.
Workplace diversity refers to the variety of differences between people in an organization. That sounds simple, but diversity encompasses race, gender, ethnic group, age, personality, cognitive style, tenure, organizational function, education, background and more.

By 2050, the U.S. population is expected to increase by 50 percent, and minority groups will make up nearly half the population. Immigration will account for almost two-thirds of the nation’s population growth. The population of older Americans is expected to more than double. One-quarter of all Americans will be of Hispanic origin. Almost one in ten Americans will be of Asian or Pacific Islander descent. And more women and people with disabilities will be on the job. (Source: U.S. Department of Labor)
Non-threatening Environment

Employees have the right to feel safe and work in a non-threatening environment.

A hostile work environment usually refers to a work environment that makes an employee emotionally and mentally unable to perform work-related tasks. However, a hostile work environment also can refer to a work environment in which an employee is threatened physically. This can include outright acts of violence, or an employee being forced by an employer to do physical tasks that may put the employee’s health at risk.

A hostile work environment may also be created when management acts in a manner designed to make an employee quit in retaliation for some action. For example, if an employee reported safety violations at work, was injured, attempted to join a union, or reported regulatory violations by management, then the employers’ response might be to harass and pressure the employee to quit. Employers have tried to force employees to quit by imposing unwarranted discipline, reducing hours, cutting wages, or transferring the complaining employee to a distant work location. The employer and the employee often mistakenly believe that if the employee quits his or her job, the employee cannot get unemployment benefits and cannot sue the employer. Neither is true.
A work environment may be considered hostile when co-workers or an employer make lewd jokes or touch persons inappropriately (sexual harassment.)

It is unlawful to harass a person (an applicant or employee) because of that person’s sex. Harassment can include “sexual harassment” or unwelcome sexual advances, requests for sexual favors, and other verbal or physical harassment of a sexual nature.

Harassment does not have to be of a sexual nature, however, and can include offensive remarks about a person’s sex. For example, it is illegal to harass a woman by making offensive comments about women in general.

Both victim and the harasser can be either a woman or a man, and the victim and harasser can be the same sex.

Although the law doesn’t prohibit simple teasing, offhand comments, or isolated incidents that are not very serious, harassment is illegal when it is so frequent or severe that it creates a hostile or offensive work environment or when it results in an adverse employment decision (such as the victim being fired or demoted.)

The harasser can be the victim's supervisor, a supervisor in another area, a co-worker, or someone who is not an employee of the employer, such as a client or customer.
It is the responsibility of both the employer and employee to impose and comply with safety precautions.

Fatalities and injuries among the nation’s workers are substantially reduced with the use of personal protective equipment (PPE) and technologies. It is estimated that 20 million workers use PPE on a regular basis to protect them from job hazards. PPE protects workers from death, disabling injuries and illnesses, as well as protecting from the specific threats of exposures to certain airborne biological particles, chemical agents, splashes, noise exposures, fall hazards, head hazards, and fires. Improvements and changes in the personal protective technologies are realized in the form of standards and regulations, revisions and alterations to existing standards, subsequent availability of PPE complying with the standards and regulations, and demonstrations of PPE use by the workers.

Falls are a persistent hazard found in all occupational settings. A fall can occur during the simple acts of walking or climbing a ladder to change a light fixture or as a result of a complex series of events affecting an ironworker 80 feet above the ground. According to the 2009 data from the Bureau of Labor Statistics, 605 workers were killed and an estimated 212,760 workers were seriously injured by falls to the same or lower level.

Centers for Disease Control and Prevention
Personal Protective Equipment (PPE).
http://www.cdc.gov/niosh/ppe/
What is a workplace emergency?

A workplace emergency is an unforeseen situation that threatens your employees, customers, or the public; disrupts or shuts down your operations; or causes physical or environmental damage. Emergencies may be natural or manmade and can include the following:

- Chemical spills
- Civil disturbances
- Explosions
- Fires
- Floods
- Hurricanes
- Radiological accidents
- Tornadoes
- Toxic gas releases
- Workplace violence resulting in bodily harm and trauma

The best practice is to **prepare** to respond to an emergency before it happens. Few people can think clearly and logically in a crisis, so it is important to do so in advance, when you have time to be thorough. You can prepare by:

- Accounting for all employees following an evacuation is critical.
- Brainstorming the worst-case scenarios. Ask what you would do if the worst happened. What if a fire broke out in your boiler room? Or a hurricane hit your building head-on? Or a train carrying hazardous waste derailed while passing your loading dock? Once an individual has
identified potential emergencies, consider how they would affect the workers and how you would respond.

- Establish evacuation routes and exits – When preparing your emergency action plan, designate primary and secondary evacuation routes and exits.

- Have an emergency action plan in place. The plan covers designated actions employers and employees must take to ensure employee safety from fire and other emergencies.

- Providing medical assistance during an emergency – If your company does not have a formal medical program, an individual may want to investigate ways to provide medical and first-aid services.

- Training employees for emergency situations by educating the employees about the types of emergencies that may occur and train them in the proper course of action.

- Ways to alert employees, including disabled workers, to evacuate or take other action, and how to report emergencies, as required.
NIOSH YOUTH @Work Video
Teen Workers: Real Jobs, Real Risks
http://www.cdc.gov/niosh/talkingsafety/video.html
Are You a Teen Worker?

You’re earning your own money. You’re making new friends. You’re learning new things and becoming independent. Work can be a fun, rewarding and an exciting part of your life. But did you know that your job could harm you?

Every nine minutes, a U.S. teen gets hurt on the job. These teens are young people like Emily, who was working alone at a sandwich shop when a robber with a gun attacked her. And they’re like Joe, a construction helper who was electrocuted on his job.

This guide gives you the facts you need to stay safe and healthy at work. It also shows you what jobs you can (and can’t do), and it teaches you about your rights and responsibilities as a young worker. 

Safety is NOT a Priority
Safety Training Video – Preventing Workplace Accidents and Injuries.
https://youtu.be/fcv1BxCL3Z8
Review

- Why should we evaluate the workplace environment?
- What work environment factors should be assessed?
- Who is responsible for assessing the work environment?
- What are ergonomics?
- Describe a non-threatening work environment.

Have students answer independently in short paragraphs on paper or allow for classroom discussion.
Resources and References

Images:
* All photos obtained through a license with Shutterstock.com™.

Websites:
* Are You a Teen Worker?
  This guide gives the facts an individual needs to stay safe and healthy at work.
* Centers for Disease Control and Prevention
  Personal Protective Equipment (PPE).
  http://www.cdc.gov/niosh/ppe/
* The Place for Ergonomics
  A resource for office ergonomic solutions
  http://www.ergoweb.com
* United States Department of Labor
  Health and safety topics.
  https://www.osha.gov/SLTC/ergonomics/identifyproblems.html
* U.S. Equal Employment Opportunity Commission
  Types of discrimination.
  http://www.eeoc.gov/laws/types/index.cfm
Resources and References

YouTube™:
• NIOSH YOUTH @Work Video
  Teen Workers: Real Jobs, Real Risks
  http://www.cdc.gov/niosh/talkingsafety/video.html
• Safety is NOT a Priority
  Safety Training Video – Preventing Workplace Accidents and Injuries.
  https://youtu.be/fcv1BxCL3Z8
• Workplace Ergonomics
  Ergonomic basics that apply to virtually any workplace.
  https://www.youtube.com/watch?v=qDUC5BlGJU&feature=youtu.be&feature=youtu.be