

## **Innovative Teaching Strategy**

**Title:** Environmental Assessment – Campus Walking Tour

**Date of Submission:** September 21, 2019

**Topical Area:** Environmental Health

### **Public Health Nursing Competencies and Standards**

- **ACHNE Public Health Nursing Core Knowledge and Basic Competencies**

2. Community/population assessment
4. Policy development
6. Health promotion and risk reduction
7. Illness and disease management
9. Environmental health
12. Ethics and social justice

- **ANA PHN Scope and Standards of Practice**

1. Assessment
2. Population and Diagnosis
4. Planning
5. Implementation
  - b. Health Teaching and Health Promotion
  - c. Consultation
  - e. Regulatory Activities
6. Evaluation

- **Standards of Professional Performance for PHN:**

1. Ethics
5. Communication
6. Leadership
7. Collaboration
9. Resource Utilization
10. Environmental Health
11. Advocacy

- **Quad Council Competencies for Public Health Nurses**

1. Analytic and Assessment Skills
2. Policy development/Program Planning Skills
3. Communication skills
4. Cultural competency skills
6. Public Health Sciences Skills
7. Leadership and Systems Thinking Skills

**Learner Level:** Undergraduate

**Learner Setting:** Classroom and walking tour of campus

**Strategy Type:** Other: Experiential Learning Activity, Alternate Activity for Clinical Day

**Learning Goals/Objectives:**

At the completion of this activity, students will be able to:

1. Describe the relationship between the environment and health.
2. Through use of the nursing process, identify and analyze basic environmental hazards in a campus setting.
3. Identify potential adverse health outcomes associated with the campus environment.
4. Synthesize environmental assessment findings when determining the health status of populations on campus.
5. Explore the role of the nurse in environmental health issues, including the roles of investigator, educator, and advocate.
6. Describe the importance of advocacy and principles of environmental justice in addressing environmental health issues.
7. Summarize how nurses can be involved in environmental policy development.

**Estimated time for activity:**

**Prior to Class:** The time required prior to class is approximately 4 hours to become familiar with the instructions, complete the reading assignments, and explore the relevant websites listed in the directions.

**Day of Activity:** In a class size of approximately 35 students, 1 hour, 50 minutes total will be a sufficient timeframe. Students will need 5 minutes to review the directions for the activity, 30 minutes to conduct the environmental assessment as a group, 15 minutes to synthesize their findings, 30 minutes for each group to present their findings to their peers, and a 30-minute instructor facilitated discussion on the implications of their assessment findings in terms of strengths and weaknesses, advocacy, and policy recommendations.

**Strategy Overview:** Students divide into groups with 5-6 students per group. Students are assigned by the instructor to a specific location on campus for their assessment. Locations may include campus health clinic, cafeteria, residence hall, library, student center, recreation center, power plant, or bookstore. Students travel as a team to their destination and complete the assessment as a group. Each team uses the same assessment framework to guide their data collection. Groups are given 30 minutes to complete their assessment. After returning to the classroom, each team synthesizes their findings and prepares to present their key findings to their peers. Key findings are listed by each team in bullet point format on flipchart paper. After all teams present their findings, a discussion facilitated by the instructor takes place to identify common themes, strengths and weaknesses, social justice issues, and potential community nursing diagnoses for the campus based on the team's aggregate findings. The discussion concludes with prioritization of needs that would improve the campus environment and brainstorming about potential strategies that could be used to influence campus policies related to the identified priorities.

### Detailed Strategy Directions:

Prior to the day of the environmental assessment walking tour, each student must complete the following activities:

#### 1. Reading Assignments

Sattler, B. (2016). Chapter 10: Environmental health. In M. Stanhope & J. Lancaster (Eds.), *Public Health Nursing: Population-Centered Health Care in the Community* (217-241). St. Louis: Elsevier.

Smith, C. (n.d.). Unit 1: Why nursing? Why nurses are involved in environmental health. *Alliance of nurses for healthy environments: Environmental Health in Nursing*. Retrieved August 15, 2019 from [https://envirn.org/wp-content/uploads/2017/06/Environmental-Health-in-Nursing\\_Unit-1.pdf](https://envirn.org/wp-content/uploads/2017/06/Environmental-Health-in-Nursing_Unit-1.pdf)

#### 2. Explore the following website links. Be familiar with the primary concepts of each site.

Healthy People 2020 Environmental Health Objectives

<https://www.healthypeople.gov/2020/topics-objectives/topic/environmental-health>

Healthy Campus 2020

[https://www.acha.org/HealthyCampus/HealthyCampus/Map-It\\_Framework.aspx#plan](https://www.acha.org/HealthyCampus/HealthyCampus/Map-It_Framework.aspx#plan)

Alliance of Nurses for Healthy Environments

<https://envirn.org/>

#### 3. Campus website ([www.semo.edu](http://www.semo.edu)). Explore the following pages and become familiar with on-campus policies related to environmental health.

##### University procedures:

Biosafety Plan

Bloodborne Pathogens Plan

Hazard Communication

Open Flame Guidelines

Respiratory Protection Program

##### Student Safety

State Department Alerts

Skateboarding and Sledding

Parkour and Free Running

Campus Crime

##### Occupational Safety and Environmental Health (OESH) Policy

Biological and Chemical Laboratory Safety

Hazardous Waste and Environmental Management

Waste Disposal Plan

Pollution Prevention

Industrial Hygiene and Safety Program

Radiation Safety

**Residence Life and Greek Housing**

Open flame devices

Hazardous chemicals

Weapons

Pets

Safety and security information

**Student Health**

Campus Health Clinic services

Tuberculosis Screening

Communicable disease investigations

Campus violence prevention program

**City Ordinances Affecting University Students**

**Campus Restrictions (tobacco, animal, ETOH)**

**STUDENT ACTIVITY DIRECTIONS:**

Your team must conduct an environmental assessment of the assigned location on campus. In your assessment, address each area listed below. Your team assessment will primarily involve use of your observation skills. You may obtain input from bystanders or people on campus who frequent this location if possible.

**Assessment Framework:**

Physical condition of the building/location (internal and external)

Obvious environmental hazards (chemical, physical, biological, and psychosocial)

Air quality

Presence of vectors (insects, rodents)

Safety hazards

Presence of waste; sanitation/trash problems

Type and quality of food available if applicable

Population density (overcrowding)

Sensory stimulation (excess or deprivation; includes noise levels)

Lifestyle factors (stress, creativity, ease of access)

Impact of environment on mental health (environmentally induced stress)

Fire protection; extinguishers, sprinklers, lighted exits

Ease of access for persons with physical limitations

Other areas that you deem important to your investigation

Summarize your findings on the flipchart paper. Be prepared to share your findings with your peers.

Include the following:

- Your assessment findings
- Analysis of general, overall risk factors and any overt health hazards you noted
- Implications for community/public health nursing. How would the public health nurse address the risk factors or health hazards you have noted in the role of educator or advocate?
- Consider opportunities for intervention, and risk reduction, especially interventions that have the potential for high impact and broad reach among populations on campus.
- Consider current campus policies that have influenced the campus environment in a negative or positive manner and carry the potential to impact the health status of the campus community.

**Method for Evaluating Student Learning: Student Evaluation Tool**

Your feedback is important. After completion of this activity, please select the response that describes the extent to which you feel the learning objectives were met. Circle the number that corresponds to your response.				
<b>Student Learning Objectives</b>	<b>Strongly Disagree</b>	<b>Disagree</b>	<b>Agree</b>	<b>Strongly Agree</b>
Describe the relationship between the environment and health.	1	2	3	4
Through use of the nursing process, identify and analyze basic environmental hazards in a campus setting.	1	3	3	4
Identify potential adverse health outcomes associated with the campus environment.	1	2	3	4
Synthesize environmental assessment findings when determining the health status of populations on campus.	1	2	3	4
Explore the role of the nurse in environmental health issues, including the roles of investigator, educator, and advocate.	1	2	3	4
Describe the importance of advocacy and principles of environmental justice in addressing environmental health issues.	1	2	3	4
Summarize how nurses can be involved in environmental policy development.	1	2	3	4

**Evaluation**

This is an in-class activity and is not graded. The instructor facilitates discussion and provides feedback throughout the process of sharing assessment findings, determination of priorities, and potential policy implications. Student feedback is obtained through a Student Evaluation Tool.

**Comment on overall success of this teaching strategy:**

This teaching strategy was developed to address the topic of environmental health and its relationship to health status. Students assume the role of investigator and consider the roles of educator and advocate as they assess their campus environment. The activity provides students with the opportunity to consider their own environment (university campus) and areas that need improvement and/or changes in campus policy to better promote health and reduce risk for the campus population.

This activity has also been used successfully as a way for students to make up a clinical day when the campus is closed due to inclement weather issues.

**REFERENCE LIST FOR FACULTY USE**

Alliance of Nurses for Healthy Environments Education Workgroup. <https://envirn.org/education/>

American College Health Association. (2012, June). *Healthy Campus 2020*. Retrieved December 21, 2019, from <https://www.acha.org/HealthyCampus>

Lopez-Medina, I., Álvarez-Nieto, C., Grose, J., Elsbernd, A., Huss, N., Huynen, M., & Richardson, J. (2019). Competencies on environmental health and pedagogical approaches in the nursing curriculum: A systematic review of the literature. *Nurse Education in Practice, 37*, 1-8.  
doi:<http://library.semo.edu:2275/10.1016/j.nepr.2019.04.004>

Stanley, M.J. & Rojas, D. (2014). Teaching undergraduate nursing students about environmental health: Addressing public health issues through simulation. *Journal of Nursing Education, 53*(1), 48-51.  
<https://doi.org/10.3928/01484834-20131218-04>