

LESSON PLAN

Topic: Hearing Loss

KERA Goals		Goal 1
Accessing Sources of Info	*	
Reading	*	
Observing	*	
Listening	*	
Quantifying		
Computing		
Visualizing	*	
Measuring	*	
Mathematical Reasoning		
Classifying		
Writing		
Speaking		
Visual Arts		
Music		
Movement		
Using Electronic Tech.	*	
		Goal 2
Nature of Scientific Activity		
Patterns	*	
Systems and Interactions	*	
Models and Scale		
Constancy		
Evolutionary Change		
Number		
Mathematical Procedures		
Space and Dimensionality		
Measurement		
Change		
Mathematical Structure		
Date	*	
Democratic Principles		
Political System		
Social Systems		
Cultural Diversity		
Economic Systems	*	
Geography & Human Activity		
Historical Perspective		

Background: Farmers and their families are exposed to many sources of noise. The noise often continues for long periods of time at levels that are potentially damaging to hearing. The farm population suffers an increased risk of hearing loss, largely due to occupational noise exposure. This exposure to high frequency noise levels may begin at a young age, and the negative results may be compounded as the person's exposure accumulates over time. The activities within this unit give students methods to prevent ear damage due to loud noises associated with farming.

Objectives: For the student to recognize the prevalence of hearing loss within agricultural occupations and be able to perform the following tasks:

- Name four examples of farm work generally reaching the excessive level
- Name the decibel level at which hearing protection is recommended
- Describe cumulative effects of hearing loss
- List three ways to protect hearing

Situation Development: Things to be brought out by the teacher in discussion to generate interest in the lesson: (See fact sheet.)

- Ask the students how many of them ever wear some type of hearing protection on their farm, and how many farmers they know that wear hearing protection. Discuss the reasons why they or others do or do not use protection.
- Discuss deafness by listing people they know who are deaf or have hearing problems. Relate to older members of their families who may be hard of hearing and the possible sources of that hearing loss.

Problem Statement: Identify the lesson topic and what the students will be answering in their activities.

- What are the main causes of hearing loss and how can hearing loss be prevented?

	Interpersonal Relationships	
	Production	
	Analysis of Forms	
	Aesthetics	
	Cultural Heritage	
	Cultural diversity	
	Language	
	Second Language	
	Family Life/Parenting	*
	Consumerism	*
	Physical Wellness	*
	Mental/Emotional Wellness	
	Community Health Systems	
	Psychomotor Skills	
	Lifetime Physical Activities	
	Career Paths	
	Employability Attributes	*
	Post-Secondary Options	
		Goal 3
	Positive Self-concept	
	Healthy Lifestyle	*
	Adaptability/Flexibility	
	Resourcefulness/Creativity	*
	Self-control/Self-discipline	*
	Ethical Values	
	Independent Learning	*
		Goal 4
	Interpersonal Skills	*
	Team Membership	*
	Consistent, Caring Behavior	
	Rights & Responsibilities	*
	Multicultural/World View	
	Open Mind	
		Goal 5
	Critical Thinking	*
	Creative Thinking	*
	Conceptualizing	
	Decision Making	*
	Problem Solving	*
		Goal 6
	Multiple Perspectives	*
	Developing New Knowledge	
	Expanding Knowledge	*

Analysis: Things to consider in analyzing the topic and reaching the conclusion:

- Discuss statistics related to hearing loss in agricultural occupations
- Incidents that cause hearing loss
- Effects of hearing loss
- Prevention of farm-related hearing loss

Directed Study: Listed below are activities that will present the concepts of preventing hearing loss. Choose the activities which best fit your time restraints, student abilities, and resource availability. Student fact sheets are included, which give information about hearing loss and protection. Duplicate these fact sheets, and use as reference sheets when conducting the activities.

- Narrative Simulation
- Physical Simulation
- Supplemental Activities:
Noise Level Recognition
Field Trip
Guest Speaker
Personal Protective Equipment (PPE)

Group Conclusion: After completion of the activities, the teacher will lead in discussion of the topic with the class, approaching the points outlined in the analysis. The students should provide information and knowledge as gained from the activities and reference materials.