Our message to you and the general public is that noise induced hearing loss is permanent and at the same time totally preventable.

HIP TALK VIDEO TIME & COUNTER INDEX

Part I: (0:00 - 9:30 min.) (000-379)
Introduction of panel and discussion of effects of noise-induced hearing loss.

Part II: (10:00 min. - 14:40 min.) (379-669)
Panel and audience discuss sources of noise and protective measures.

(14:55 min. - 17:37 min.) (687-869)
Demonstration of the use of an audiogram. Flintstones segment demonstrating noise induced hearing loss.

Part III: (18:33 min. - 29:58 min.) (890-1101)
Discussion of the use of ear plugs. Question and answer period between panel and audience.

Part IV: (29:58 - 34:32) (1102-1290)
Advice from panel and discussion of "Boom" cars. Wrap up.

HIP TALK was developed by the House Ear Institute and is partially funded by grants from the Mix Foundation for Technical Excellence and the National Academy of Recording Arts and Sciences, Inc.

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Written by Jeannine Bone and Charlie Lahale
Curriculum Written and Developed by Dilys Jones
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Graphic Design by David Pascal/ D Squared
Printed by The Castle Press, Pasadena, CA
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<td>David Pack</td>
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<td>Les Paul</td>
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<td>Steve J. Rawisser</td>
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<td>Nancy Severinsen</td>
<td>TV &amp; Film Music Supervisor</td>
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<td>Alan Sidus</td>
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<td>Jim Twerdahl</td>
<td>Vice Chairman of the Board</td>
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<td>House Bar Institute</td>
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Dear Educator:

The House Ear Institute and MIX Magazine are pleased to present HIP TALK!: The Hearing Is Priceless (HIP) Program, a set of multimedia educational materials on noise pollution and hearing protection. These materials are designed to supplement your regular curriculum and stimulate student awareness of the dangers of exposure to loud volumes of sound over extended lengths of time. They provide a selective overview on medical, environmental and federal concerns on the effects of noise pollution and methods of protection against hearing loss.

The materials examine the impact of over-exposure to loud sounds on the sense of hearing and the long-term side effects. They include a teacher's lesson guide, a thirty-minute videotape, a video guide and student activity sheets. Students will learn, through the narrated experiences of successful music industry professionals, the importance of hearing protection and the dangers in listening to loud music. Individuals will come to understand that practicing safe health habits should include protecting one's hearing.

HIP TALK! has been made possible by grants from the MIX Foundation for Technical Excellence and the National Academy of Recording Arts and Sciences, Inc. Ear plugs have been donated by Howard Leight Industries.

Your opinions on these materials are invaluable to us. We invite you to fill out the enclosed teacher evaluation. Your responses will direct us in developing future programs for the classroom.

Please use the educational materials in ways that are appropriate for your class. We hope you find them useful and look forward to hearing from you. For further information please call Dily Jone or me at (213) 483-4431.

Sincerely,

Charlie Lahai

Ms. Charlie Lahai
Director, HIP Campaign
House Ear Institute
The House Ear Institute and MIX Magazine are proud to present HIP TALK: Hearing Is Priceless (HIP), an educational program developed by physicians, educators and community leaders to complement the regular curriculum. The set of multimedia materials provides the teacher with an innovative method of educating students on the environmental issue of noise pollution and its impact on the sense of hearing.

In the HIP package you will find:

- A teacher’s guide containing different segments: *Understanding How the Ear Conducts Sound * Noise and Our Environment * Dangerous Levels and Protective Measures. Each segment provides lesson information and student activities to teach pupils the significance of hearing loss, how to develop better listening habits, and reduce noise in their environment.
- A thirty-minute videotape in a talk-show format which presents a new perspective on the presence of music in our lives. Successful musicians discuss volume control, hearing loss, and prevention measures with a teen audience.
- A video index ~ which helps you access segments of the tape.
- Reproducible student activity sheets.
- HIP campaign buttons.
- Noise filter ear plugs.
- An evaluation which will allow us to receive valuable feedback about the program.

(continued on next page)
This curriculum supplement is designed to:

- Improve knowledge of how noise affects everyday life.
- Promote safe listening habits.
- Generate better understanding of the sense of hearing.
- Increase awareness of noise pollution in our environment and promote abatement measures.

The House Ear Institute has made every effort to create an educational supplement that meets the highest curricula standards, and at the same time is easy to present and fun to learn. We hope that after implementing these materials appropriately for your class, you will supply us with information by returning the enclosed evaluation.

Our best wishes for a successful and enjoyable learning experience.

Get HIP! Hearing Is Priceless!
ALL ABOUT THE EAR—OR HOW DO WE HEAR?

There are three main parts to the ear: the outer, middle, and inner, each playing an important role in allowing us to hear sound.

The outer ear, or pinna, is the part you see. It is designed to gather sound and direct it through the outer ear canal to the eardrum. The canal efficiently collects sounds in all frequency ranges, but we only hear sounds ranging from 50 - 15,000 Hertz (Hz) with speech patterns falling in the 300 - 4,000 Hz range. Frequency is measured in cycles per second, or Hertz. The higher the pitch of the sound, the higher the frequency.

The middle ear consists of the eardrum and three tiny ear bones (hammer/malleus, anvil/incus, stirrup/stapes) known collectively as the ossicles. The eardrum is a thin membrane stretched across the ear canal which vibrates in response to sound, converting energy in the form of sound waves to mechanical vibrations which activate the ear bones. Acting as a piston, the stirrup pushes against the fluids of the inner ear setting up vibrations which become nerve impulses in the inner ear.

The inner ear contains the snail-shaped hearing organ called the cochlea and the semicircular canals which control the sense of balance. Lining the spirals of the cochlea are more than 30,000 microscopic hair cells attached to nerve fibers, which, depending on their location in the cochlea, respond to different frequencies, allowing for discrimination of speech sounds. These cells convert the mechanical vibration from the middle ear into electrical energy which is then conducted by the hearing nerve to the brain where the signal is interpreted as sound.

(continued on next page)
Usually waves of sound pass over the tiny hairs like blades of grass before the wind, so that they spring back into position after the sound wave passes. However, one loud blast of sound or constant exposure to huge waves of sound, can push the hair cells too far and permanent damage may occur. The high-frequency sensors in the large outer area of the cochlear are damaged first, then the damage progresses through the turns in the cochlea. Once the cells die, contact with the hearing nerve fibers is broken and a loss in a particular frequency range results. The loss is permanent as the nerves have been damaged.

Get HIP! Hearing Is Priceless!
NOISE POLLUTION IN OUR ENVIRONMENT

More than 20 million people in the United States are exposed to dangerous noise levels that could result in hearing loss. Firemen, police officers, construction and heavy industry workers, military personnel and farmers are all exposed to high risk environments. Technology has advanced so that music played at high volumes creates risky conditions to audio and entertainment industry professionals and today’s recreational activities are often carried out in very noisy surroundings.

Noise in the Workplace:

Noise is an annoying, and sometimes hazardous part of the workplace as accidents may occur through inattention or failure to hear warning signals. It can be an additional stress factor for many people working in crowded office buildings filled with the sounds of competing voices and ringing telephones.

Intensity of sound is measured in decibels (dB) and hearing loss depends on length of exposure as well as loudness or intensity. The Occupational Safety and Health Administration (OSHA) has set guidelines for the length of time a person can be exposed to various levels of loud noise beginning at 90 decibels (dBA) and not exceeding 115 dBA for continuous noise levels.

<table>
<thead>
<tr>
<th>Safe Sound Level</th>
<th>Duration per Day</th>
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<tr>
<td>90 dB</td>
<td>8 hours</td>
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<tr>
<td>92 dB</td>
<td>6 hours</td>
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<td>95 dB</td>
<td>4 hours</td>
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<td>97 dB</td>
<td>3 hours</td>
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<tr>
<td>100 dB</td>
<td>2 hours</td>
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<td>102 dB</td>
<td>1 1/2 hours</td>
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<tr>
<td>105 dB</td>
<td>1 hour</td>
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<td>110 dB</td>
<td>1/2 hour</td>
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<tr>
<td>115 dB</td>
<td>1/4 hour or less</td>
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Experts have expressed concern that workers often disregard the hearing protection methods used in industry and the federal regulations. Noise reduction or protection through earplugs or earmuffs, are the only ways to prevent noise-induced hearing loss.

Get HIP! Hearing Is Priceless!
Recreational Noise:

Since it is exposure to excessive noise over time that wears down the hair cells, we should be aware that noise does not stop when we leave the workplace. Unknowingly, we introduce more noise into our environment with power tools, audio equipment, motor engines and guns. Often we use amplified sound to mask other noise, such as traffic or voices, thereby increasing the volume level being introduced into the ear.

Some common recreational activities which pose potential hazards to our hearing include:

- Attending live music performances where sound levels often exceed 120 dB. The closer you are to the speakers, the greater the risks involved.
- Frequenting dance clubs or exercise classes where increased volume is used to create a “mood.”
- Portable cassette players and personal headset stereos are capable of producing sound levels of more than 115 dB. A study shows that most people listen through their headsets at volumes of 100 dB or more.
- Audio systems and car stereos frequently blare at damaging levels.
- Electronic arcade games emit sounds ranging from 70 - 111 dB.
- Sports such as target shooting, speedboating, motorcross, or auto racing all pose real dangers to both participants and spectators.
- Noise levels from firecrackers at an average distance of 10 feet vary from 125 - 155 dB.
- Power lawnmowers, leafblowers, chainsaws and occupations or hobbies that involve the use of machinery such as lathes and power tools, can pose potentially hazardous situations.

Get HIP! Hearing Is Priceless!
Noise at Home:

Most of us think of home as a place where we can relax from the stress and noise of everyday life. But is that true? Too often sounds such as dogs barking, street traffic, and noisy neighbors disturb our peace and quiet.

Air conditioners, food blenders, vacuum cleaners, washing and drying machines, dishwashers, and automatic coffee grinders all emit noise at levels which vary from 50 dB - 72 dB which are more irritating than dangerous. Some of the early-model cordless telephones rang at a dangerous level of 140 dB at the ear.

We use noise to stimulate, attract, and divert our children:

- Rattles and squeaky toys are often used close to the infant's sensitive ears at sound levels as high as 110 dB.

- Toys imitating firearms emit explosive sounds which have been measured at 150 dB a foot away.

- The volume on musical toys such as trumpets, drums, and xylophones varies from 95 dB - 122 dB depending on the distance from the point of origin.

- Mobile toys such as vehicles and robots sound off at 82 - 101 dB.

These noisy toys may cause a child to equate noise with excitement and happiness. This pattern might continue throughout their life, possibly putting them at greater risk for noise-induced hearing loss at an early age.

Get HIP! Hearing Is Priceless!
HOW LOUD IS TOO LOUD? – HOW DOES IT AFFECT ME?

Sound is measured in a logarithmic scale of decibels (dB). This means that every increase of 10 dB measured, multiplies the intensity of the sound by ten. In other words, a sound at 80 dB is 1,000 times stronger than that sound measured at 50 dB, at 70 dB it is 100 times stronger, and at 60 dB it is 10 times stronger. A whisper is measured at 30 dB, normal conversation at 60 dB and rock music at 100 dB and up.

Hearing loss is not the only result of overexposure to noise. The ears provide a direct link to the nervous system affecting other parts of the body and the quality of life. On a temporary basis, noise has been found to increase blood pressure, change the way the heart beats, affect the rate of breathing, cause chronic headaches, disrupt sleep, cause stomach disorders and generate a general feeling of stress.

Other permanent effects might occur in the ear itself which can cause a lot of distress. The most common side effect is tinnitus, a “ringing” or “roaring” in the ears that almost everyone has experienced fleetingly. However, noise can cause this to become a permanent condition in which the ringing may become maddening. What makes this so distressing is that it happens inside your ear with no means of shutting it out! Sometimes medication or diet can control the intensity of tinnitus, but there is a very real possibility that it may never go away.

Warning signs occur after exposure to loud volumes of sound, indicating that your hearing might be at risk. These are:

- A temporary ringing or buzzing in the ears following exposure to high volume of sound.
- A slight muffling of sounds for a few minutes or hours after exposure.
- Difficulty in understanding speech. You can hear the words but you cannot understand all of them.
- Background sounds become more and more invasive over a period of time. This causes difficulty when following conversations in crowded rooms or where the acoustics are poor.

Get HIP! Hearing Is Priceless!
GET HIP! HEARING IS PRICELESS

Hearing loss due to noise is permanent, but it can be prevented.

How To Tell When The Noise Levels Are Dangerous:

- You have to raise your voice to be heard.
- When you are listening to a headset stereo and you cannot hear the person next to you talking in a normal tone.
- Speech around you sounds muffled or dull after you leave a noisy area.
- If you can hear the sound of your neighbor's headset.
- You have ringing in the ears after exposure to noise.

Ways to Protect Your Hearing:

- Be aware of the noise level of your surroundings. Whenever possible, turn down the volume!
- Wear commercially available hearing protectors, such as ear plugs or earmuffs, when you know you are going to be exposed to excessive noise.
- Alternate a noisy activity with a period of quiet to rest your ears.
- Limit the length of time that you are exposed to noise.
- Select toys, appliances, and activities which do not pose a threat to hearing.
- If you are subjected to loud noise on a regular basis, have your hearing tested by an audiologist at least once a year.
- You can make the difference by speaking out at home, at work, or at leisure. You can inform people of the dangers of loud noise and ask them to make the difference.

Music is here to stay,  
make sure you hearing is too!

Get HIP! Hearing Is Priceless!
Lesson 1

Circle the correct answer(s):

There are _____ main parts to the ear.
2 4 3 6

The outer ear gathers sound and directs it through the _____ to the eardrum.
brain ear canal hearing nerve

The higher the pitch of the sound, the higher the frequency.
True False

Circle the names of the three bones of the middle ear.
hammer piston saddle stirrup anvil

As sound passes through the middle ear, sound waves are changed into vibrations which move the ear bones.
True False

The hearing organ is shaped like a _____.
snail hammer wheel drum

The sense of balance is controlled by part of the inner ear.
True False

There are more than _____ microscopic hair cells attached to nerve fibres in the hearing organ.
3,000 10,000 1,300 30,000

Different areas of the hearing organ respond to different frequencies.
True False

The hearing nerve conducts electronic signals to the brain which decodes them as sound.
True False

Very loud sound can damage your hearing permanently.
True False

When hearing loss occurs, difficulty in hearing low frequency sounds is first noticed.
True False
Lesson 2

Circle the correct answer(s):

Hearing loss is caused by the combined effect of _____ and _____.
   high sounds  loud volume  time exposed  low sounds

If I exercise my ears with loud noise, they will become stronger.
   True  False

If I cannot turn down the volume I can protect my ears with ________.
   cotton swabs  headphones  earplugs  tissue  earmuffs

Name three activities or toys which can harm hearing.

   ___________________________________________________________

Every ten _____ of sound multiply the volume ten more times.
   hertz  frequencies  decibels  tones

If my ears are muffled after being exposed to noise, I can clear them by swallowing.
   True  False

___________ in my ears after loud noise may mean that I have damaged my hearing.
   Wax  Itching  Ringing  Aching

As I get older, my hearing is going to ____________.
   get better  get worse  stay the same

If someone needs to shout so I can hear them over my headset, the sound level is _____.
   just right  too loud  too soft

If I am in a noisy place I can protect my ears by:
   1. __________________________________________________________
   2. __________________________________________________________
   3. __________________________________________________________

Hearing loss from noise will go away.
   True  False

Hearing loss from noise can be prevented.
   True  False
Lesson 1

Circle the correct answer(s):

There are ____ main parts to the ear.

2  4  3  6

The outer ear gathers sound and directs it through the ear canal to the hearing nerve.

True  False

The ____ of the sound, the higher the frequency.

higher the pitch  lower the pitch

The bones of the middle ear are collectively called the ____.

stapes  malleus  ossicles  cochlea

The bones are activated by vibrations created by sound waves.

True  False

The snail-shaped hearing organ is called the ____.

pinna  eardrum  cochlea  anvil

The sense of balance is controlled by part of the inner ear.

True  False

There are more than ____ microscopic hair cells attached to nerve fibres in the hearing organ.

3,000  10,000  1,300  30,000

The nerve endings in different parts of the cochlea respond to the same frequencies.

True  False

The hearing nerve conducts ____ signals to the brain where they are interpreted as sound.

sound  mechanical  electronic  voice

Very loud sound can damage your hearing permanently.

True  False

Loud noise first damages the sensors responding to _____.

low frequencies  high frequencies
Lesson 2

Circle the correct answer(s):

Hearing loss is caused by the combined effect of ____ and ____.

- high sounds
- loud volume
- time exposed
- low sounds

I can condition my ears by exposing them to loud sounds.

- True
- False

If I cannot turn down the volume I can protect my ears with: ____

- cotton swabs
- headphones
- earplugs
- earmuffs
- tissue

Name three activities or toys which can harm hearing.

________________________________________________________________________

A sound measured at ____ is 100 times stronger than a sound measured at 50 dB.

- 60 dB
- 70 dB
- 80 dB
- 90 dB

After loud noise, muffled sounds mean that my ears are protecting themselves.

- True
- False

___________ in my ears after loud noise may mean that I have damaged my hearing.

- Wax
- Itching
- Ringing
- Aching

As I get older, my hearing is going to _____________.

- get better
- get worse
- stay the same

If I can hear my friend’s voice over my headset, the sound level is ______.

- just right
- too loud
- too soft

If I am in a noisy place I can protect my ears by:

1. _______________________________________________________________________
2. _______________________________________________________________________
3. _______________________________________________________________________

Hearing loss from noise cannot be cured.

- True
- False

Hearing loss from noise can be prevented.

- True
- False
Lesson 1

Circle the correct answer(s):

There are ____ main parts to the ear.
2 4 3 6

The outer ear gathers sound and directs it through the ear canal to the:
brain eardrum hearing nerve

The higher the pitch of the sound, the ________.
lower the frequency higher the frequency

The ossicles of the middle ear are individually named:
malleus piston saddle incus stapes

The mechanical vibrations which activate the ear bones get their energy from ____:
electricity sound waves air currents fluid

The snail-shaped hearing organ is called the ____.
pinna eardrum cochlea anvil

The sense of balance is controlled by part of the inner ear.
True False

There are over 30,000 microscopic hair cells attached to ____ fibres in the hearing organ.
tissue muscle brain nerve

It is the number of nerve fibres, rather than the location in the hearing organ, that allows us to respond to different frequencies.
True False

The hearing nerve conducts ____ to the brain where they are interpreted as sound.
sound waves mechanical vibrations electronic signals

Excessively loud sound can damage your hearing permanently.
True False

The sensors which are damaged first, affect the ability to hear ____.
low frequencies high frequencies
Lesson 2

Circle the correct answer(s):

Hearing loss is caused by the combined effect of _____ and ____.  
   over exposure    high tones    high decibels    low tones

Conditioning my ears to high volumes will prevent my hearing from being damaged.  
   True    False

If I cannot turn down the volume I can protect my ears with: ____  
   cotton swabs    headphones    earplugs    earmuffs    tissue

Name three activities or toys which can harm hearing.  
   ___________________________________________________________

A sound measured at 70 dB is ____ times stronger than a sound measured at 50 dB.  
   two    twenty    ten    hundred

Muffling sound is nature's way of protecting the ears after exposure to loud noise.  
   True    False

_________ in my ears after loud noise may mean that I have damaged my hearing.  
   Wax    Itching    Ringing    Aching

As I get older, my hearing is going to ___________.  
   get better    get worse    stay the same

If I cannot hear my friend talking over the music in my headset, the sound level is ____.  
   just right    too loud    too soft

If I am in a noisy place I can protect my ears by:  
   1. ___________________________________________________________  
   2. ___________________________________________________________  
   3. ___________________________________________________________

A noise-induced hearing loss is permanent.  
   True    False

Hearing loss from noise can be prevented.  
   True    False
1. Glossary of HIP Talk Terms
2. Chart of decibel levels
3. Diagram of the Ear - Scientific/Medical terminology
4. Diagram of the Ear - Lay terminology
5. Diagram of the Ear - Blank
6. Audiogram
7. Teacher Evaluation
## Glossary of Hip Talk Terms

- **amplifier**: electrical equipment that increases audio levels
- **audible**: able to be heard
- **audiogram**: a chart plotting individual hearing ability
- **audiologist**: professional hearing specialist
- **audio technology**: sound technology
- **auditory**: dealing with the hearing process
- **crash cymbal**: thinner cymbal with higher pitch
- **dB (decibel)**: units used to measure sound levels
- **ear plugs**: devices used for hearing protection
- **exposure**: time present in a certain environment
- **filter**: screen
- **fidelity**: clarity and trueness of sound
- **“flying” speakers**: speakers mounted above the stage
- **frequency**: unit which indicates pitch of sound
- **gig**: live performance
- **hearing threshold**: softest sounds one can hear
- **hearing aids**: electronic listening devices
- **house mix**: the level and blend of sound heard by the audience
- **mix**: blending and setting of the volume and equalization of individual soundtracks produced by each instrument and voice used in a song
- **monitor mix**: sound heard by musicians from a speaker on stage
- **monitoring system**: system feeding mixed sound directly to musicians during performance
- **noise-induced**: caused by over-exposure to noise
- **PA cabinets**: load speakers
- **personal stereo**: portable stereos with headsets (e.g., walkman)
- **pitch**: high or low tones
- **sensori-neural hearing loss**: damage to sensory organ of sound or hearing nerves
- **sound pressure levels (SPL)**: physical measurement of audio volume
- **sound level**: volume of sound
- **speech range**: the volume range of normal conversation levels
- **tinnitus**: ringing sensation in the ears
- **roadies**: crew who set up band equipment
Diagram of the Ear
Diagram of the Ear
Lay Terms

Structure of the human right ear, cut open to show schematically the outer, middle and inner ear.

©1992 House Ear Institute. All Rights Reserved.
Diagram of the Ear
Scientific/Medical Terms

Structure of the human right ear, cut open to show schematically the outer, middle and inner ear.
Decibel Levels

FAINT
30–40 dB

MODERATE
50–70 dB

VERY LOUD
80–100 dB

EXTREMELY LOUD
110–130 dB

PAINFUL
140–170 dB

WHISPER

CONVERSATION

FIRE CRACKERS
(at 10 feet)

ROCK CONCERT

AIRPLANE
HIP TALK EVALUATION FORM

Please take a few moments and answer the following questions about the HIP TALK segment of the Hearing is Priceless program. Your responses will be helpful in evaluating the effectiveness of our program. Please be assured that your responses are confidential.

About how many students participated in the HIP TALK program? ______

What is the age range of the students who participated? ______________

What is the grade level of the students who participated? ______

The following questions pertain only to the HIP TALK videotape.

Did you show the HIP TALK videotape? ___ Yes ___ No If No, skip to top of Page 2.

How well did the students understand the dangers of noise-induced hearing loss, as presented by the panel of musicians?

<table>
<thead>
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<th>Score</th>
<th>Description</th>
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<tbody>
<tr>
<td>1</td>
<td>not at all</td>
</tr>
<tr>
<td>2</td>
<td>somewhat</td>
</tr>
<tr>
<td>3</td>
<td>very much</td>
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How well did the students like the HIP panel of musicians?

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<tr>
<th>Score</th>
<th>Description</th>
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</thead>
<tbody>
<tr>
<td>1</td>
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<td>somewhat</td>
</tr>
<tr>
<td>3</td>
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</table>

How well do you think the students identified with the teen audience in the video?

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<tr>
<th>Score</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>not at all</td>
</tr>
<tr>
<td>2</td>
<td>somewhat</td>
</tr>
<tr>
<td>3</td>
<td>very much</td>
</tr>
</tbody>
</table>

What impact do you think the Flintstones cartoon segment had on the students?

<table>
<thead>
<tr>
<th>Score</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>no impact</td>
</tr>
<tr>
<td>2</td>
<td>some impact</td>
</tr>
<tr>
<td>3</td>
<td>a lot of impact</td>
</tr>
</tbody>
</table>

How well do you think the students understood the segment demonstrating how an audiogram is used?

<table>
<thead>
<tr>
<th>Score</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>not at all</td>
</tr>
<tr>
<td>2</td>
<td>somewhat</td>
</tr>
<tr>
<td>3</td>
<td>very well</td>
</tr>
</tbody>
</table>

How well do you think the students understood the importance of using hearing protection?

<table>
<thead>
<tr>
<th>Score</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>not at all</td>
</tr>
<tr>
<td>2</td>
<td>somewhat</td>
</tr>
<tr>
<td>3</td>
<td>very well</td>
</tr>
</tbody>
</table>

House Ear Institute
The following questions pertain only to the Ear Anatomy and Noise Pollution lessons.

Did you give the Ear Anatomy lesson?  Yes  No
If yes, did you adapt the lesson in ways other than suggested in the instruction packet?  Yes  No
If yes, please explain:  

Did you give the Noise Pollution lesson?  Yes  No
If yes, did you adapt the lesson in ways other than suggested in the instruction packet?  Yes  No
If yes, please explain:  

For each question below, circle the number [1 through 5] that corresponds to your rating.

Overall, how well did you like the lesson?

Ear Anatomy  
1  2  3  4  5
not at all somewhat very much

Noise Pollution  
1  2  3  4  5
not at all somewhat very much

How would you rate the concepts presented in the lesson?

Ear Anatomy  
1  2  3  4  5
too difficult just right too easy

Noise Pollution  
1  2  3  4  5
too difficult just right too easy

How would you rate the level of detail provided?

Ear Anatomy  
1  2  3  4  5
too much just right not enough

Noise Pollution  
1  2  3  4  5
too much just right not enough

House Ear Institute
How helpful did you find the accompanying lesson materials?

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Ear Anatomy</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>not at all helpful</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>somewhat helpful</td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>very helpful</td>
<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td><strong>Noise Pollution</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>not at all helpful</td>
<td></td>
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<td></td>
<td></td>
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<tr>
<td>somewhat helpful</td>
<td></td>
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<td></td>
</tr>
<tr>
<td>very helpful</td>
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How would you rate the questions in the student quiz?

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<th>4</th>
<th>5</th>
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</thead>
<tbody>
<tr>
<td><strong>Ear Anatomy</strong></td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>too difficult</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>just right</td>
<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>too easy</td>
<td></td>
<td></td>
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<td></td>
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<tr>
<td><strong>Noise Pollution</strong></td>
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<tr>
<td>too difficult</td>
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<tr>
<td>just right</td>
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<td></td>
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<tr>
<td>too easy</td>
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</table>

As a group, how well did the students like lesson?

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<th></th>
<th>1</th>
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<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Ear Anatomy</strong></td>
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<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>not at all</td>
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<tr>
<td>somewhat</td>
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<tr>
<td>very much</td>
<td></td>
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<td></td>
</tr>
<tr>
<td><strong>Noise Pollution</strong></td>
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<td></td>
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<tr>
<td>not at all</td>
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<tr>
<td>somewhat</td>
<td></td>
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<td></td>
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<tr>
<td>very much</td>
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</table>

How would you rate student participation?

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</thead>
<tbody>
<tr>
<td><strong>Ear Anatomy</strong></td>
<td></td>
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<td></td>
<td></td>
<td></td>
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<tr>
<td>poor</td>
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<tr>
<td>average</td>
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<tr>
<td>good</td>
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<tr>
<td><strong>Noise Pollution</strong></td>
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<tr>
<td>poor</td>
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<td>average</td>
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<td></td>
</tr>
<tr>
<td>good</td>
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</table>

The following questions pertain to the entire HIP TALK program. If you did not present the entire program, please answer for those parts you did present.

In what subject (i.e., Health, Social Studies, Science) did you incorporate the HIP TALK program?

________________________

Please describe how you incorporated the HIP TALK program into your lesson plan?

________________________

How long did it take you to read and prepare the HIP TALK program materials before presenting it to your students? _____ hour(s)

*House Ear Institute*
How would you rate the preparation time needed to present the HIP TALK program?

1 very long 2 moderately long 3 not long at all

How long did it take you to actually present the HIP TALK program? ______ hour(s)

How would you rate the presentation time needed for the HIP TALK program?

1 very long 2 moderately long 3 not long at all

Did any other school staff participate with you in presenting the HIP TALK program? ___ Yes ___ No

If yes, please explain: ____________________________

______________________________

Did the HIP TALK program stimulate additional lesson plans or ideas? ___ Yes ___ No

If yes, please describe: ____________________________

______________________________

Would you consider presenting the HIP TALK program to your class next year? ___ Yes ___ No

Would you recommend the HIP TALK program to other teachers? ___ Yes ___ No

To the best of your knowledge, did the students talk about the impact of loud noise or music on hearing outside of class? ___ Yes ___ No

Your Name: ____________________________

Teaching Specialty: ____________________________

Years of teaching experience: ______

School Name: ____________________________

School Address: ____________________________

Street ____________________________

City ____________________________ State/Providence ______ Zip ______

Country ____________________________

If we may call you for further information regarding the HIP TALK program and its implementation in the classroom, please provide us with a phone number and a time when you can be reached.

_________ (Area Code) ____________ Telephone Number

We welcome additional comments or suggestions you may have regarding the HIP TALK program. Please feel free to attach your comments to this evaluation. Thank you for your help in evaluating the HIP TALK program.

House Ear Institute  DJJ:dm