



Bon Jovi Unplugged on VH1

VH1 Music Studio
Cable in the Classroom

Lesson for Music Classes, Grades 7-12
Lesson 1: Acoustic or Electric?

Note to Teachers: The programs viewed in conjunction with these lesson plans may include references, consistent with the eras portrayed, to substance abuse, violent acts, and topics of a sexual and/or political nature. Because this may be considered inappropriate for classroom use in some communities, you are encouraged to review the programs before presenting them to your students, and if necessary, choose those sections that enhance your lesson and are acceptable for use in your classroom.

Objectives

- Students will identify acoustic and electric-acoustic instruments in “Livin’ on a Prayer.”
- Students will discuss differences in sound production of acoustic and electric-acoustic instruments.
- Students will discuss basics of amplification and use of microphones.

National Standards:

6. Listening to, analyzing, and describing music.
7. Evaluating music and music performances. .
9. Understanding music in relation to history and culture.

Materials

- VHS VCR Player
- Television
- *Bon Jovi Unplugged on VH1*
- Audio amplification equipment
- Audio playback equipment
- Paper/pencils and paper (for students)

Prior Knowledge:

- Students should have basic prior knowledge of audio amplification equipment operation and use.
- Students should have prior knowledge of the terms “acoustic” and “electric” as they relate to musical instruments.

Procedures

1. Cue *Bon Jovi Unplugged on VH1* to beginning of tape. View the performance of “Livin’ On a Prayer,” which will lead to a discussion of acoustic and electric instruments.
2. Begin the discussion by explaining how acoustic and electric-acoustic instruments produce sound. With acoustic instruments, a sound wave is created which travels through the air. Electric-acoustic instruments, such as a guitar or violin, also produce a vibration. A device known as a “pickup” captures the vibration and converts it into an electrical impulse, which is then sent to an amplifier or similar device for sound amplification or recording.
3. View “Livin’ on a Prayer” again, this time searching for any purely acoustic instruments, or acoustic instruments which have been converted to produce sound electronically.
4. Have the students list any acoustic instruments which are producing sound electronically, and answer the following questions:
 - Are these instruments truly “unplugged?” acoustic instruments? Why or why not?
 - Are performance considerations any different when playing an electric-acoustic instrument as opposed to a pure acoustic instrument of the same type (dynamics, timbre, etc.)?
 - Are electric-acoustic instruments, such as violins and guitars, readily accepted in genres of music that are predominantly acoustic such as Bluegrass music? (many Bluegrass artists prefer to play only acoustic instruments and use microphones for amplification. Electrified versions of acoustic instruments have caused controversy in other styles of music. Bob Dylan caused an uproar in the folk music community when he “went electric” for the first time at the 1965 Newport Folk Festival. See “Supplemental Resources” below for website resources if you wish to implement this topic into the lesson).

Extensions:

If time permits, you may also wish to discuss how the electrical impulses generated by pickups and microphones are used to create amplified sound. While acoustic instruments may often use pickups, they may also be “mic’ed” with various types of microphones. For instance, specialized microphones are made for the sole purpose of micing a drumset. *Condenser* microphones are often used in studio recording situations and in live performance situations where a large group sound must be captured, such as with an orchestra or choir. *Dynamic* microphones, such as the legendary Shure SM57 and SM58, are also used in vocal and instrumental applications. These microphones (and others like them) are made to capture close-range sound. You may wish to assign your students a project of investigating the many different types of microphones available for vocal and instrumental applications (See “Supplemental Resources” for more information)

Supplemental Resources:

How Sound Works and Principles of Acoustics: <http://gcmusiccenter.org/php/facility/acoustics/how.sound.works.php>

The Physics Classroom - Sound Waves:
<http://www.physicsclassroom.com/Class/sound/U11L1a.html>

Dylan Goes Electric:
http://campus.queens.edu/depts/english/dylan_goes_electric_the_newport_.htm

The Other Side of the Mirror - Bob Dylan Live at the Newport Folk Festival
(DVD available October 30, 2007)

Musician’s Friend Online - instruments, microphones and amplification equipment:
<http://www.musiciansfriend.com>

National Standards for Music Education

1. Singing, alone and with others, a varied repertoire of music.
2. Performing on instruments, alone and with others, a varied repertoire of music.
3. Improvising melodies, variations, and accompaniments.
4. Composing and arranging music within specified guidelines.
5. Reading and notating music.
6. Listening to, analyzing, and describing music.
7. Evaluating music and music performances.
8. Understanding relationships between music, the other arts, and disciplines outside the arts.
9. Understanding music in relation to history and culture.



These standards-based materials are provided through a partnership with MENC: The National Association for Music Education. This lesson plan was created by MENC member Brad Foust, Highland Oaks Elementary School, Memphis, Tennessee