

LESSON PLAN: Comparing the Broadcast and Satellite Radio Landscapes

Procedure

I. Satellite History:

a. Have students read the following documents from the NASA web site to learn about the history of satellite communication:

<http://www.hq.nasa.gov/office/pao/History/sputnik/index.html>

<http://www.hq.nasa.gov/office/pao/History/sputnik/sputorig.html>

b. After reading the material, have students work in small groups or individually to develop responses to the following:

1. Why was the U.S. government and the American public concerned when the U.S.S.R. launched Sputnik, an Earth-orbiting satellite, in October of 1957?

[It was an indication that the Soviets might be surpassing the U.S. technologically, fueling fears that Soviet advances with satellite technology would increase their ability to launch missiles armed with nuclear warheads at U.S. targets.]

2. How long did it take after the launch of Sputnik for the U.S. to successfully launch a similar satellite? What was the name of that Satellite, and what was the most important outcome of that mission?

[On January 31, 1958, approximately four months after the launch of Sputnik I, the U.S. launched Explorer I. Explorer I carried a device to measure the radiation encircling the earth. The data that was collected allowed scientists to verify the existence of the earth's magnetic field, and the discovery of what came to be known as the Van Allen radiation belts.]

3. What is the name of the U.S. government agency whose mission is to "plan, direct and conduct aeronautical and space activities?" When was this agency established, and who was the U.S. president at the time of its creation?

[The National Aeronautics and Space Administration (NASA) was authorized by Congress in July of 1958, and started functioning in October of the same year, during the Eisenhower administration.]

c. Have students discuss their answers as a group. Then explain how satellite technology has expanded to include radio.

- In the 1950s, scientists began exploring the possibility of using rocket technology to launch artificial satellites into the earth's orbit. Their initial goal was to equip these artificial satellites with equipment that would send signals back to earth to assist in mapping the planet's surface.

- After the Soviet Union launched Sputnik, and the U.S. followed soon after with the Voyager and Explorer satellites, the use of artificial satellites soon expanded to be used for military uses such as surveillance and missile tracking, in addition to cartography.

- In 1960, TIROS, the first weather satellite was launched by NASA.
(<http://www.earth.nasa.gov/history/tiros/tiros.html>)

- Businesses soon realized that there were commercial applications for satellite technology

- In the 1960s and 70s, the commercial use of satellite technology expanded. Communications satellites enabled broadcasters to televise live events from all over the world in real time. For example, the Telstar II communications satellite allowed viewers in Britain to watch 30 minutes of live coverage of the JFK funeral; The Syncom III satellite allowed U.S. viewers to see live coverage of the opening ceremonies of the 1964 Summer Olympics in Tokyo.
(http://www.tvhistory.btinternet.co.uk/html/early_satellite.html)

- In the 1980s, the first Direct-To-Home Satellite TV services were established. While these services offered subscribers greater flexibility in programming options than broadcast or cable, they required very large satellite dish receivers that were up to 12 feet in diameter. In the 1990s, Direct Broadcast Satellite service was introduced in the U.S. that makes use of a much smaller 18" dish.

- September 25th, 2001 - XM Satellite Radio goes live. July, 2002 - Sirius Satellite Radio goes live.

II. Telecommunications Act of 1996:

Prior to 1996, Federal Communications Commission (FCC) regulations prohibited a single corporation from owning more than two radio stations in a single market, or more than 40 stations nationwide. The purpose of these regulations were to insure that no single broadcasting company could gain too much control over the media or advertising in a given local market, or nationwide.

The Telecommunications Act of 1996 eliminated the cap on the number of stations a company could own nationally, and increased the number of stations in large markets that a company can own to eight.

According to the FCC's web site, the Telecommunications Act provided the "first major overhaul of telecommunications law in almost 62 years," with the goal of the law being to "let anyone enter any communications business -- to let any communications business compete in any market against any other." Critics argue that the Act has enabled big broadcasting companies to control too large a share of the music and information that goes out over the airwaves, resulting in fewer opportunities for divergent political viewpoints to be heard and for artists that perform non mainstream music to succeed.

a. Have students read the transcripts of the NewsHour interviews with Senator Byron Dorgan from North Dakota and Al Peterson of Radio and Records Magazine discussing two differing viewpoints on the impact of media ownership deregulation in the wake of the 1996 Telecommunications Act.

<http://www.pbs.org/newshour/media/newsradio/dorgan.html>

<http://www.pbs.org/newshour/media/newsradio/peterson.html>

b. After reading the material, have students work in small groups or individually to develop oral or written responses to the following:

1. How many stations did the largest radio corporation own in 1996, prior to the passage of the Telecommunications Act? How many does the largest radio corporation own now?

[In 1996 the largest radio conglomerate owned just 36 stations and now ClearChannel owns more than 1,200]

2. Do you think the fact that a single company can control the music that gets played on hundreds of stations across the country has had an impact on the music that you choose to listen to? Why or why not?

3. Do you think that consolidation of broadcast ownership affects the types of music that bands choose to make? In what ways?

4. What about when the broadcast company owns not only the radio stations but also the concert promotion and venues. How much power should one company have to control pop culture - what bands get played and when, where or even if they can perform live? Should the government regulate the control of performance venues similar to the way they regulate broadcast outlets?

c. Have students discuss their answers as a group. Then explain to them that even with new outlets for music and news like satellite broadcasting and the Internet, over-the-air broadcast outlets continue to wield significant power. There have been several incidents in the last couple years that can serve as catalysts for classroom discussion of the topic of the impact of media consolidation on the democratic process:

- In March of 2002, Natalie Maines of the Dixie Chicks told an audience in London that she was "ashamed to be from the same state as President Bush." Soon after, Cumulus Media demanded that deejays on Cumulus' 42 Country stations stop playing the Dixie Chicks music. (http://www.pbs.org/now/transcript/transcript229_full.html)

- In the lead up to the Iraq War in 2002-2003, Clear Channel was accused of organizing pro-war rallies. (<http://www.pbs.org/now/commentary/moyers32.html>)

- In April of 2004, the Sinclair Broadcasting Networks ordered its ABC affiliates not to air an edition of Nightline that honored American military personnel killed in Iraq, claiming that Nightline was promoting an anti-war agenda. During the 2004 Presidential Campaign, Sinclair ordered all 62 of its stations to air a documentary that was critical of the Kerry campaign, claiming that it was a documentary and therefore exempt from equal time provisions. (http://www.pbs.org/newshour/bb/media/july-dec04/sinclair_10-12.html)

Ask students to discuss how they feel about an increasingly smaller number of corporations controlling more and more of the news and information that is broadcast over-the-air.

III. Satellite Radio

a. Have students read the transcript of the NewsHour Extra article on satellite radio: http://www.pbs.org/newshour/extra/features/jan-june05/radio_1-14.html

b. After reading the material, have students work in small groups or individually and respond to the following:

1. How many subscribers do Sirius and XM currently have?

[XM has 3 million listeners, Sirius 1 million]

2. What percentage of the total population does that represent?

[Combined that represents just over 1.3% of the total population.]

3. Do you think the consolidation of media outlets in the wake of the Telecommunications Act has affected the democratic process? Does satellite radio improve the situation?

4. What role, if any do you think the new ownership laws have played in the success of the Satellite Radio industry so far?

c. Have students discuss their answers as a group. Then ask them to consider the importance of a diverse media in a democracy and what role direct satellite services like XM and Sirius might play moving forward. They should also consider how the role of over-the-air broadcast of radio and TV has changed in the 50 years since the first artificial satellite was launched.

One side of the argument might be that:

1) New technologies like satellite services like XM, Sirius as well as the Internet provide new choices for citizens.

2) Because of the increasing use of such new technologies, the impact of over-the-air broadcast outlets is much less than it was when it was one of just a few sources for news, information and entertainment.

3) It really doesn't matter that the broadcast media ownership is more consolidated because there are plenty of other places to get news, information and entertainment.

An opposing view would be that:

1) Even in a world with divergent information sources like satellite broadcast services and the Internet, the broadcast outlets continue to wield great power to shape opinion. They also remain enormously lucrative as business ventures, and both reasons explain why there was such pressure to change the laws in the first place.

2) There are still large numbers of citizens who rely solely on over-the-air broadcasting for news, information and entertainment, and these people are often less affluent members of society who don't have the financial means to have access to satellite services or the Internet.

3) In addition to remaining diligent in bringing the broadcast ownership laws back to pre 1996 levels, we should also consider the wisdom of having a satellite broadcasting universe where there are only two options. (i.e., how do XM and Sirius, as the only two major players really differ from over-the-air networks like Clear Channel, Westwood One and Cumulus?) We should also consider tough federal regulation of the satellite broadcasting world.