

Tips for Using Instructional Video and Public Television Programming in the Classroom

Instructional video is an enhancing and enriching resource for classroom teachers and is designed to match curriculum areas. It provides:

- A sharp focus
- Clarity of concepts
- A historical perspective
- Expeditions into the real world
- Visual experiences from beyond the classroom walls
- Enhancement of printed materials and understanding of contemporary issues
- Higher learning outcomes
- An introduction
- A reinforcement

I. Prior to the Video-Based Lesson

Teacher Preparation

- A** Consider the learning objectives.
- B** Consult the ITV Resource Guide to select appropriate programs.
- C** Look through the teacher's guide for ideas and activities. Teachers should select segments targeted to meet lesson objectives and students' needs.
- D** Preview the program. If necessary, determine order of segmentation.
- E** Consider post-viewing activities.

Student Preparation

- A** Ask students thought-provoking questions.
- B** Explain why the video is being used.
- C** Prepare students for important visual images.
- D** Discuss major points covered by the program.
- E** Provide focus activities or viewing directions for individuals, small groups, or the entire class.
- F** Present new vocabulary and/or review material necessary for understanding program content.
- G** List key concepts on the chalkboard or overhead projector.

II. Focus for Media Interaction: Viewing Video

- A Engage students' viewing attention by having them watch or listen for specific information.
- B Give students a task to be completed during or after the video segment is shown.
- C Check to see if students completed the task successfully.

III. Viewing Activities

- A Keep lights on and watch the program with your students.
- B Segment the viewing of the program. Stop the video and ask key questions to stimulate on-the-spot discussions and critical thinking. **Example:** *Based on what you have seen so far, what do you think will happen next?*
- C Consider showing the video without sound. Narrate the program or ask a student to do so.
- D Darken the screen and use only the audio component.
- E Show brief clips. Only a 30-second image might be necessary.

IV. Post-Viewing Activities

- A Discuss the program.
- B Recognize diverse reactions. Help students relate the program to their own feelings and experiences.
- C Connect the program to prior or anticipated classwork.
- D Introduce extension activities, such as:
 - Creative writing
 - Long-term projects
 - Role-playing
 - Art projects
 - Video productions
 - Visits from experts

Video Utilization Strategies

Preview each program carefully to determine its suitability for achieving the lesson's objectives and the students' learning outcomes.

Select Segments that are most relevant to your lesson topic. Often a program has a great deal of information that cannot be digested at once; in that event, it is useful to show the program in segments so that its content is more easily understood.

Lights on During Viewing indicates to students that the video is an integral, active part of the lesson and that they are responsible for its content, as well as any pre-viewing or post-viewing instruction that may be given to them by the teacher.

Provide a Focus for Media Interaction. Provide students with a specific task to complete and/or information to identify during or after viewing of video segments. Teachers should introduce videotape segments with a question, things to look for, unfamiliar vocabulary, or an activity that will make the program's content clearer.

Conduct Introductory and Culminating Activities. Integrate the video into the overall learning experience by framing the lesson with experiential components. Activities should be done prior to viewing videotape segments to set the stage, provide background information, identify new vocabulary words, or to introduce the topic. An additional activity should be done following viewing to reinforce, apply, review, or extend the information conveyed by the program.

Pause while viewing to:

- Check the students' comprehension
- Ask questions
- Have students record information, make predictions, analyze what they've seen
- Examine a chart, formula, or image on the screen more closely
- Have the students draw a diagram

Eliminate either the sound or the picture, if appropriate. For example, a segment may feature outstanding cinematography and/or graphics, but may be accompanied by narration inappropriate for your students. In such cases, turn down the volume and provide your own narration. Another strategy is to eliminate the sound and have your students describe the images they see. Alternatively, you can isolate the soundtrack by covering the monitor, and have your students guess what is happening based on the narration alone. These strategies can be expanded with **closed captioned** programming: turn down the audio and have the students follow the action by reading along, or leave only the captioned text visible to reinforce vocabulary and improve reading comprehension.

Tips for Using the World Wide Web in the Classroom

The Web is an extremely rich and powerful classroom resource that, when used properly, can enhance your curriculum, motivate students, and address many different learning styles. Resources available on the Web range from extensive access to texts, such as the complete works of Shakespeare, to rich interactive multimedia and online activities, such as the Virtual Flylab. The Web can enhance almost any curriculum topic, provided that the time is taken to find precisely those Web sites that match the lesson goals, learning objectives, and curriculum standards.

The Web is a vast resource of relevant educational materials in many media, including images, text, interactive activities, and collaborative projects.

The Web provides:

- **Text resources:** a veritable "library of Alexandria" at your fingertips: from the complete works of Shakespeare to the entire Buddhist Pali canon available online, the Web is a vast repository of text archives free and accessible to all;
- **Virtual fieldtrips with walk-throughs, fly-bys, and virtual reality tours through all kinds of places:** deep inside a cell, a simulation of a black hole in deep space, or "visits" to faraway locales and cultures;
- **Up-to-the-minute information (real-time data)** with stock prices, webcams, earthquake data, and satellite images;
- **The ability for instant communication with other students and experts-in-the-field;**
- **Collaborative projects that are easily implemented;**
- **A place to showcase student work online.**

I. Prior to the Media-Rich Lesson

Teacher Preparation

- A** Begin with the learning objectives and goals of the lesson; this is a good place to formulate some of the search terms to use in search engines. Careful listing of specific search terms can avoid irrelevant search query results.
- B** While doing an initial search for Web resources, bookmark relevant sites. Make notes about what to look for on each of the sites; simply cutting and pasting text and images from a Web site into a word processing document can start the process of creating student handouts.
- C** Evaluate what you have found for accuracy, age appropriateness, and relevance to the lesson.
- D** Look for connections among the sites that you have found; the careful selection of several complementary sites can suggest student activities such as comparisons and contrasts between two sets of data or two opposing viewpoints.
- E** Preview all sites again with a critical and discerning eye. How can these Web resources can be used in a lesson? Edit the list of Web sites collected into two groups: 1) those essential to the lesson and 2) those that are "filler" and may be relegated to a list of related sites for students to explore outside of class.
- F** If possible, "beta test" some of the Web sites with selected students to gauge their reactions and gain insight into how well the Web sites match the learning objectives.

Student Preparation

- A** Ask students thought-provoking questions. Poll the students to assess their current knowledge; begin with the big ideas in an effort to dispel misconceptions in their understanding of the topic.
- B** Explain why the Internet is being used.
- C** Prepare students for significant and pertinent media and alert to them to what kinds of media they will be accessing: video, audio, photographs, illustrations, charts, or text.
- D** Discuss major components of the Internet resources.

- E** Provide focus activities tied to the Web sites that can include worksheets, handouts, and scavenger hunts which can guide them in viewing the online resources.
- F** Present new vocabulary and/or review material necessary for understanding relevant content that will be accessed on the Web.
- G** Chart a pathway for students to follow in one of the following ways:
 - Create a word-processed document that students can access on their computers to click through embedded Web links;
 - Bookmark all Web sites on their computers; or
 - Create a Web page with all lesson resources, questions, vocabulary, and background information available to the students.

II. Focus for Media Interaction: "Surfing the Web"

- A** Provide the students with a "context for the content" by having them watch for specific information. Provide a set of guidelines for collating data, saving images, or evaluating information found on the Web.
- B** Give students a set of assigned tasks on which to focus their attention while surfing through the Web sites. A student worksheet or checklist with questions and lists of things to see and explore on the Web will help keep the students "on task."
- C** Monitor and assist the students while they are on the Web. Check to see if they can complete the assigned tasks in the time allotted.

III. Surfing Activities

- A** Supervise the students while they are on the Web. Encourage the students to look for related links if they have extra time.
- B** Occasionally direct the entire group's attention to a particularly important Web site (a large monitor or projector can be used) and engage the students in on-the-spot discussions to promote critical thinking.

- C** Ask students to describe what they find and how they might verify the authenticity and accuracy of the information found on the selected Web sites.

IV. Post-Surfing Activities

- A** Create opportunities for the students to use the information they find in meaningful and educationally viable ways. Creating multimedia presentations, charting data, and contributing to collaborative projects are all ways to involve the students in going beyond "information retrieval."
- B** Help students interpret and analyze what they have found, making connections to other curricular topics that they have worked on or will be involved with in the future.
- C** Introduce curriculum extensions that demonstrate connections of the material to other disciplines. Science, math, art, music, social studies, language arts, and other interdisciplinary approaches to the topic can be supported with related Web sites.
- D** Devise an Action Plan that involves an activity connected to the world outside of the classroom: a field trip, a visit to the school by an expert, or e-mail exchange or campaign reinforce the lesson and add another dimension.

Internet Utilization Strategies

Media Prep. Determine suitability for achieving lesson objectives and student learning outcomes. Check to see that the entire site is age appropriate and that links from the site are also age appropriate. Make certain that site content is aligned with the stated goals of the lesson, and analyze the source of the site to assure its legitimacy. Prior to the start of class, visit the site (and all pages that you wish to highlight) for faster downloading of images and graphics during the demonstration.

Bookmarking. Before class begins, bookmark all lesson Web sites on demonstration and workstation computers. This will allow students to easily get to the Web pages that you wish them to see. By clicking with the mouse on "Add Bookmarks" from the "Bookmarks" pull down menu in Netscape Navigator or "Add to Favorites" from the "Favorites" pull down menu in Internet Explorer, the URL (Web address) will be easily accessible from your computer.

Provide a Focus for Media Interaction. Provide students with a specific task to complete and/or information to identify during or after interaction with Web sites. Teachers should introduce Web sites with a question, things to look for, unfamiliar vocabulary, or an activity that will make the site's content clearer.

Conduct Introductory and Culminating Activities. Integrate the Internet into the overall learning experience by framing the lesson with experiential components. Activities should be done prior to viewing Web sites to set the stage, provide background information, identify new vocabulary words, or to introduce the topic. An additional activity should be done following Internet use to reinforce, apply, review, or extend the information conveyed by the program. Tasks assigned should be objective, specific, and easy to assess.

Pause While Examining Web Sites to:

- Check for student comprehension
- Solicit inferences or predictions
- Highlight a point
- Define a word(s)
- Compare to real-life events
- Have students work online
- Solve a problem, form a hypothesis
- Enhance students' observation and memory skills.

Supervise the Students. The school should have a signed Acceptable Use Policy (AUP) from each student on file. Students should always be monitored while they are on the Internet to make certain they stay "on task" and are not visiting inappropriate or unrelated sites.

Reference Web Sites. Make certain students reference both text and images copied or referred to from the Web. Be sure to include the author, title, source, copyright date, and URL.

Copy and Paste. To avoid long printing queues, have students "copy and paste" only those images and text needed to complete an assignment into a word processing document. Show students how to send only one page of a particular Web site to the printer. Teach your students how to reference copyrighted materials.

NTTI Media-Rich Lesson Template

YOUR NAME

LESSON TITLE

Create a descriptive, catchy name for the lesson.

Example: *“Come On, Baby, Light My Fire!”*

GRADE LEVELS

State targeted grade level(s), but remember that all lessons may be adapted to any level.

TIME ALLOTMENT

Number and length of class periods needed to complete the lesson.

OVERVIEW

Provide a brief description of the lesson. Summarize goals and activities.

SUBJECT MATTER

List subject areas addressed in the lesson.

LEARNING OBJECTIVES

List specific core-curriculum objectives and student outcomes.

Example: *“Students will be able to...”*

STANDARDS

List national and/or state standards that are addressed in the lesson. Please indicate the source of these standards.

MEDIA COMPONENTS

List video programs, Web sites, and any multimedia tools used in the lesson. When using video, list program title and episode number; when using the Web, list Web site title, URL, a 1-2

sentence description of the site, and any necessary plug-ins. For any other media tools, list title, computer platform, and distributor.

MATERIALS

List all outside materials needed to implement the lesson. Include amount needed *Per Class*, *Per Group of Students*, and/or *Per Student*.

PREP FOR TEACHERS

Instruct teachers to bookmark Web sites, load plug-ins, cue videotapes, and prepare student materials and hands-on elements of the lesson.

Your completed lesson plan should read like a script for the lesson. Include as much details as possible in the body of your lesson. When using media, provide students with a ***Focus for Media Interaction***, a specific task to complete and/or information to identify during or after viewing of video segments, Web sites, or other multimedia elements.

INTRODUCTORY ACTIVITY: SETTING THE STAGE

Write a detailed narrative description of activities, discussions, or media-integrated exercises that introduce the lesson, direct students to targeted concepts or objectives, and introduce the lesson vocabulary. Divide each component of the Introductory Activity into numbered steps.

LEARNING ACTIVITIES

Provide a detailed narrative description of the steps teachers will need to follow in order to successfully facilitate the lesson. Divide each component of the Learning Activities into numbered steps.

When using ***video***, identify segments to be used with visual and/or aural cues. Highlight interactive techniques such as those shown at right, indicating specific techniques and their rationales. Include activities/discussions used between video segments.

When surfing the ***Web***, describe procedures for teachers, sequence of surfing events, and background information. Embed Web titles

Interactive Techniques

Check (for comprehension)
Cue
Fast Forward
Focus for Media Interaction
Mute
Pause
Play
Rewind
Resume Play
Stop

and URL's into lesson description. Include activities/discussions used between Web sites.

CULMINATING ACTIVITY

Bring closure to the lesson with an activity tied to lesson objectives. A hands-on component is often included here. Hands-on activities are investigative, exploratory lesson components where students reinforce concepts and processes through their own manipulation of data, documents, or materials.

CROSS-CURRICULAR EXTENSIONS

List cross-curricular activities and interdisciplinary projects that may be generated from the lesson.

COMMUNITY CONNECTIONS

Include real-world actions students can take to follow through on lesson concepts. These include activities such as interviews, community-based art projects, performances, portfolios, and letter or email writing to relevant government, academic, or business personnel. For additional insight into community-based projects, go to the *Making Family and Community Connections* site at www.thirteen.org/edonline/concept2class/month9.

STUDENT MATERIALS

Your lesson plan must also include any worksheets, resources, or reference materials that will be distributed to students before, during, or after the lesson.

NTTI Media-Rich Lesson Planning Guide

Title _____

Time Allotment _____

Grade Level(s) _____

Overview _____

Subject Matter _____

Learning Objectives _____

Standards _____

Media Components - Video

Media Components - Web

Prep for Teachers _____

Introductory Activity (*remember to number each step*)

Materials _____

Learning Activities (*remember to number each step*)

Materials _____

Culminating Activity (*remember to number each step*)

Materials _____

Cross-Curricular Extensions _____

Community Connections _____

Student Materials _____

Techno-Tips: Video

Features to Increase Your Options

Remote	Provides teacher mobility in the classroom. Manufacturers have streamlined VCRs so that many features may now exist only on the remote.
Memory	When activated, tape will return to 0000 and stop. It is useful to set memory for multiple presentations.
Rewind	Press "Stop" first. The rewind will be faster, with less damage to the tape.
Fast Forward or Fast Scan or Search	Skip over what you don't want to show.
Slow Motion	Reduces action to component parts for analysis.
Frame Advance	Move forward one frame at a time.
Pause or Freeze Frame	Holds a single image for about two minutes.

Taping Programs

Programming	VCRs vary. Make sure you set the day/date/time (a.m., p.m. or 24 hour clock).
VCR Plus+	Widely sold device that simplifies off-air taping. Choose the program, then enter the five-digit code number published in many TV listings.
Speed	Most VCRs have 3 speeds. You lose some picture quality as you expand tape time. (T- refers to minutes in standard play.)
SP	Standard Play – (T-60 = 1 hour; T-120 = 2 hours).
LP	Long Play – doubles time (T-60 = 2 hours; T-120 = 4 hours).
EP or SLP	Extended Play or Super Long Play – triples time (T-60 = 3 hours; T-120 = 6 hours).
New (Blank) Tapes	Fast forward to the end, then rewind to prevent distortion.

Saving Recordings

Removing the small plastic square in the spine of the cassette will prevent taping-over of the material on the cassette. Refer to the Overview of Educational Off-Air Recording Rights in your NTTI Binder for legal guidelines.

Troubleshooting

Refer to the Troubleshooting Guide in your NTTI Binder. Also, refer to your VCR manual (many manufacturers have toll-free lines). You may also try calling your cable company.

Troubleshooting VCR Problems

Use this chart to help you pinpoint and correct minor video difficulties.

Symptom	Check	Remedy
VCR power light does not come on.	Is the cord plugged into working outlet?	Try another outlet.
	Is the record/timer switch on?	Move switch to OFF.
	Is the machine's fuse blown?	Replace fuse with a new one.
Videocassette cannot be inserted into the machine.	Is the VCR empty?	Eject the videocassette.
	Are you holding the cassette properly?	Make sure the side with the "door" faces into the machine.
VCR does not operate when buttons are pressed.	Is the timer button pressed?	Release the timer button.
TV picture appears fuzzy, snowy or not sharp; audio is distorted.	Is fine tuning adjusted?	Adjust the fine tuning knob until the picture is clear and the audio is undistorted.
TV picture looks dull or dark.	Is brightness control adjusted?	Readjust brightness control.
TV picture is rolling vertically.	Is the vertical hold knob adjusted?	Turn the vertical hold knob until the picture stops rolling.
TV picture displays diagonal lines.	Is the horizontal hold knob adjusted?	Turn the horizontal hold knob until the picture looks normal.
Picture has excessive static.	Are tape guides, rollers, or head drum dirty?	Clean the VCR head with cleaner.
Picture is jumping or blurry.	Is the tracking adjusted?	Move tracking dial to stabilize the picture.
Playback picture should be in color.	Is color switch in "off" or B/W position?	Put switch in color position.
	Are color controls adjusted? Was the tape recorded in color?	Make the proper color adjustment with knobs on the front of the set.

Note: *If adjustment knobs are not visible, check to see if they are behind a panel door.*