

Welcome to PVTV LEARNING, from ParkerVision. This curriculum represents the most advanced and effective way to teach high school and college students the science of modern television broadcast. Until now, most broadcast curriculums focused on methodology that evolved over 30 years ago. This curriculum, however, covers basic production techniques and equipment, and then transports the students into the advanced automation technologies that are quickly becoming the norm in today's television broadcast industry.

If you have elected to download only the PDF versions of the Teacher's and Student's Editions of PVTV LEARNING, feel free to jump right into teaching. Throughout the chapters, you will see references made to additional materials in the way of on-line lessons and tests, and explanatory videos and animations.

This additional material is available to educators at a significantly discounted cost in electronic format (on a CD ROM). For more information on obtaining this additional material for your school, visit our LEARNING web site at www.PVTVLEARNING.com or contact us as shown below.

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Purpose

Instructional television and instructional videos are an important tool used in both the business world and in schools. They can condense time and let you see a project unfold from start to finish. They can be designed to educate beginners, inform more advanced students about new techniques or processes and even motivate people to perform a task better. Watching an instructional video is also a great way to review class material to catch up if you've missed a class or assignment. For example, if you didn't understand a particular direction or just want to watch a segment again to make sure you really understood, you can rewind and review as many times as needed.

The optimum length of an instructional video is under ten minutes, with about eight minutes being the average. After that, viewers' attention will lapse and they will most likely miss or fail to retain important information. If the steps to completing the project take longer than ten minutes to explain and demonstrate, divide the video into sections, keeping each section to less than ten minutes long.

Depending on the task or project, you may see the finished result at the beginning of the video. You then follow each step until you have the same result.

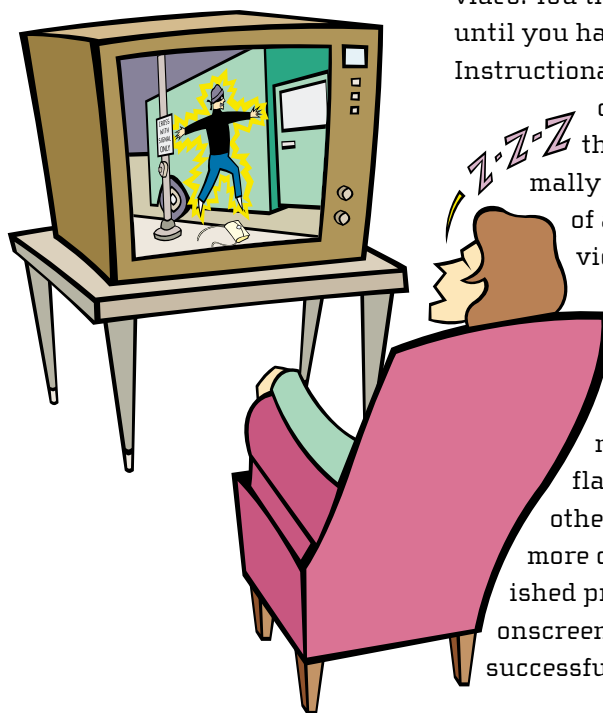
Instructional videos also include close-ups and details that you might not normally see. The effectiveness of an instructional video is judged by how well the average person can duplicate the results shown on the video, not by the number of flashy special effects or other gimmicks used. The more closely the actual finished project matches the onscreen version, the more successful the video.

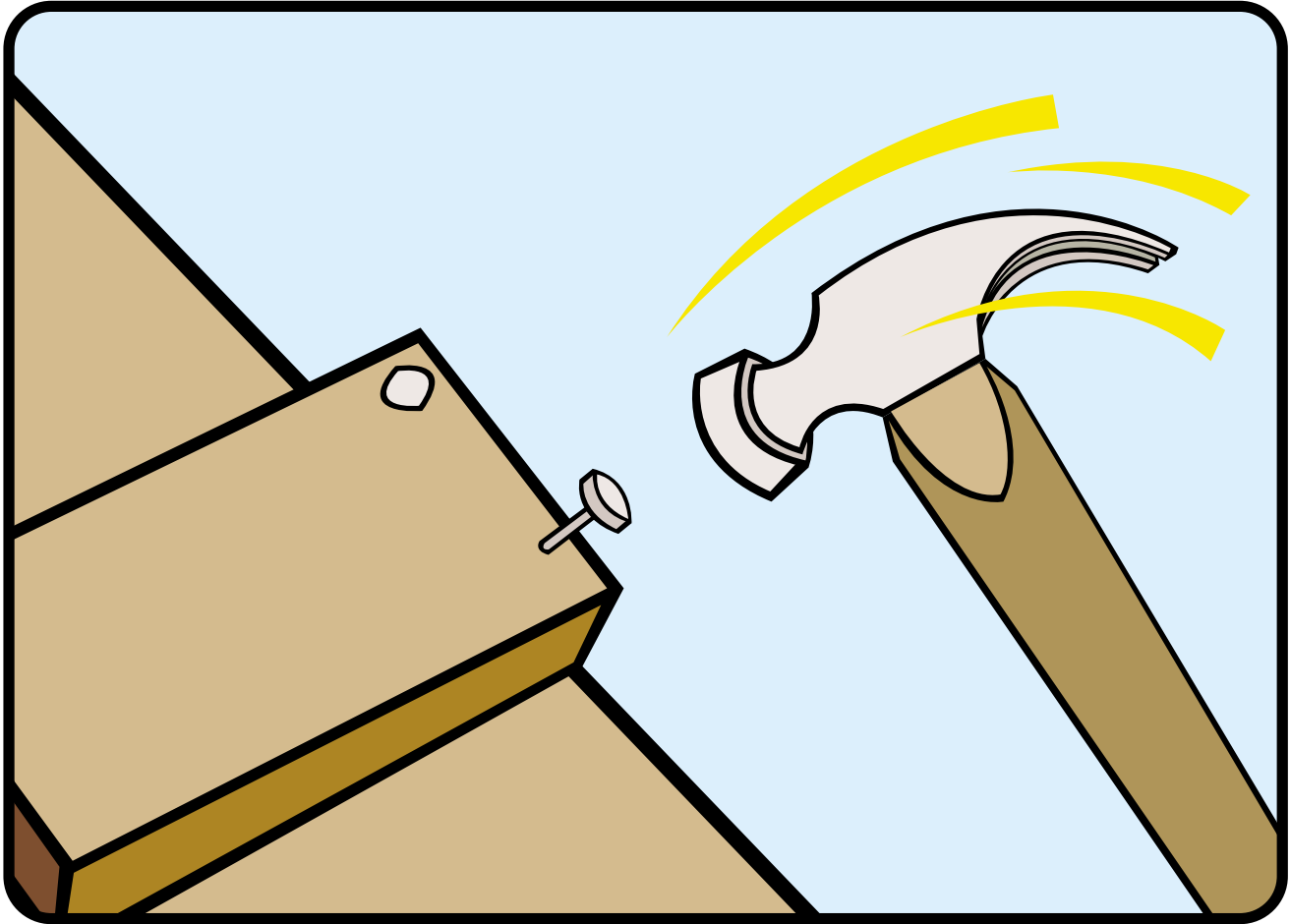
online
LESSON:
1

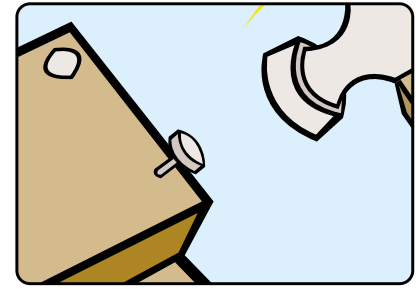
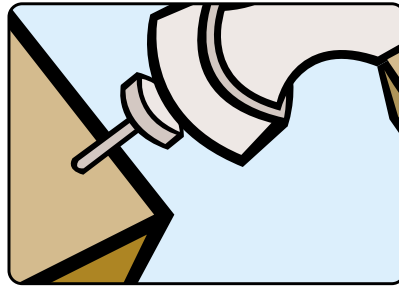
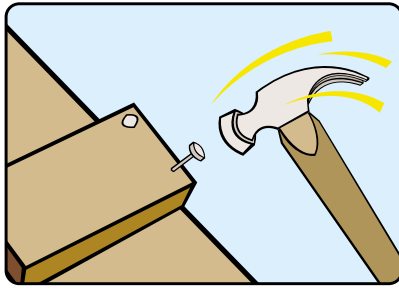
Objectives:

After completing this section you will be able to

- Identify applications in which instructional videos can enhance traditional teaching methods







Planning and Production

There are two parallel areas for which you must plan when creating an instructional video – content and technical considerations. First determine the content of your video. You want to keep it narrow in scope, so it is usually a good idea to limit your topic to one “action.” Then decide the best way to present the information in a clear and understandable style. You may want to use a storyboard to sketch out the steps and shots.

show the results of a completed task at the beginning of the video. Viewers need to know what they can expect to learn, create or do if they follow the steps and perform the tasks correctly. Then you can tell them how to do the task, and finally provide a summary of the key steps.

Before beginning the actual lesson you may want to provide a list of materials needed to complete the task and instructions about how to set up the working area. A graphic page listing the supplies might be a good idea. Advise the viewer to work under conditions similar to those shown in the demonstration. You might also want to provide some background

online
LESSON:
2

Next you must plan for the technical needs. This includes listing the equipment required, identifying location concerns and making a detailed shot list. We'll focus on the content first and then on these technical issues.

The adage “Begin with the end in mind” definitely applies to instructional videos. Be sure to

Objectives:

After completing this section you will be able to

- Describe the planning process for the content of an instructional video
- Describe the planning process for the technical requirements of an instructional video
- Produce a simple instructional video



LIST OF TOOLS NEEDED

- Hammer
- Nail
- Wood
- Tough thumbs

online LESSON: 2

information before starting, and be sure to give any precautionary warnings before you begin.

One of the best ways to plan an instructional video is to break the project down into small steps and follow an outline. The first part of the video covers all preliminary preparation, materials needed, time requirements, safety requirements and the intended outcome. The next section is the actual instruction. Decide what would be the most interesting and effective way to deliver the instructions, and never sacrifice accuracy for entertainment. The main goal is to teach. Decide which method would be best: including a host who teaches and provides additional commentary, using a narrator to voice over the instructions as someone demonstrates the steps on camera, combining these two approaches or thinking up a creative new way to get your idea across.

Script your instructions and any additional remarks as if you were teaching one person. Use direct address and the word “you” to help your audience feel more

STEPS

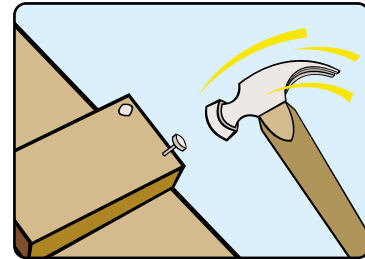
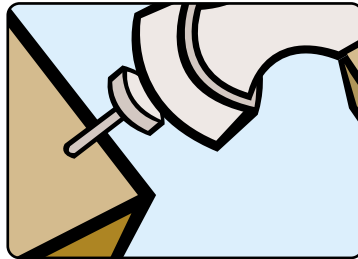
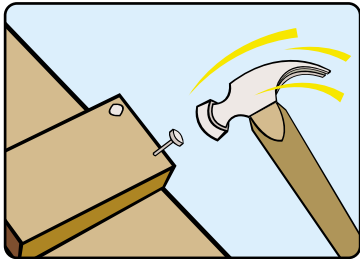
- Step 1
- Step 2
- Step 3

involved. Make sure you use language that is appropriate for the age, education and lifestyle of your audience, and try to avoid a lot of buzzwords and jargon your viewers may not understand. Be sure to define and explain all technical terms. Try to keep your script brief, and do not overwhelm viewers with too much information or too many concepts. Remember, all this information will be new to them.

Build breaking points into the script so the viewer can work to a specific place, stop the tape and be prepared to pick up later where he or she left off. The final portion of the video should review each step briefly, wrap up the project and give any tips or additional information. Be sure to follow the rule of “Tell 'em what you're going to tell 'em, tell 'em, and tell 'em what you told 'em!”

REINFORCING STRUCTURE

- Tell 'em what you're going to tell 'em
- Tell 'em
- Tell 'em what you told 'em

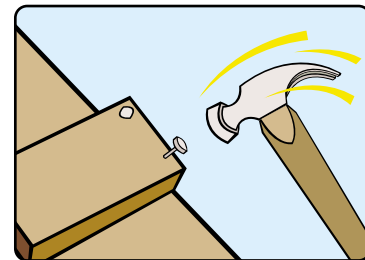
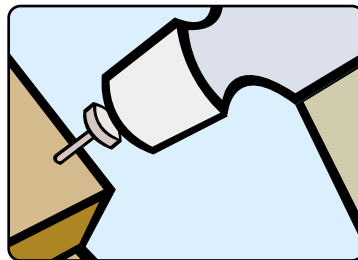
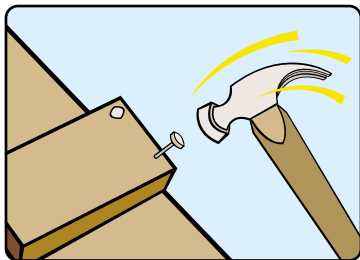


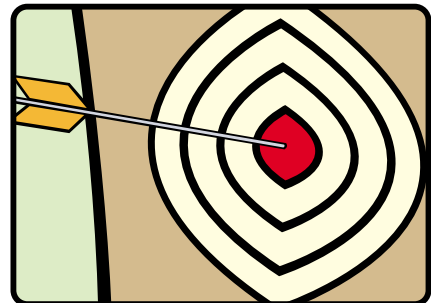
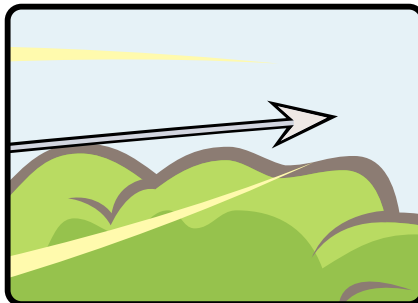
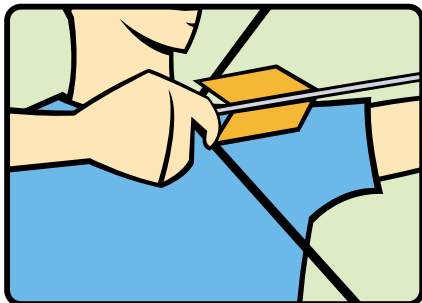
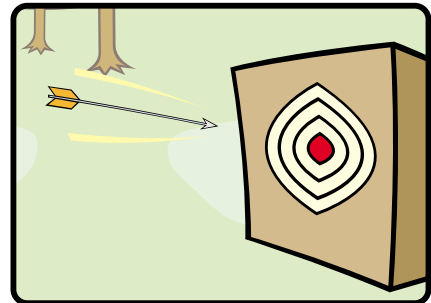
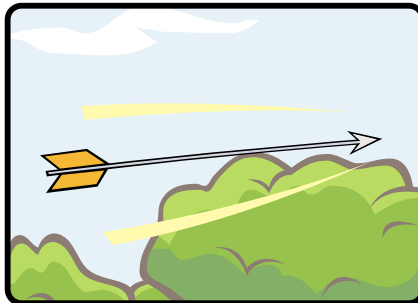
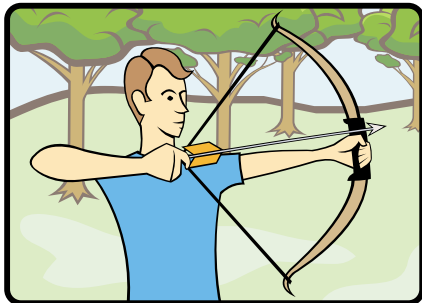
online
LESSON:
3

Next you must focus on the technical considerations. The type of project determines what equipment you'll need. If you have the luxury of using two or more cameras, you should plan for one camera to cover the long and medium shots while a second camera focuses only on the close-up shots. If you have a time code setting on your cameras, set them to "time of day," and match the code before you start. This will make editing easier. If you must shoot using only one camera, plan to shoot the long shots and medium shots first. Then move in and do the close-ups. These close-ups (also called cut-

ins) can be edited in between the long and medium shots in the final program to show details.

Be certain not to break continuity between takes and continuous action. This means that there should be no abrupt shifts in background or foreground between two consecutive shots meant to represent continuous action, even if you have to shoot the cut-ins later. Rewind the footage you've shot to check where background and foreground items were the first time you shot, and make sure they match between shots. Otherwise, when you edit you may have a problem with jump cuts and continuity errors.





online
LESSON:
3

If you are shooting an action you will also need to match it from shot to shot. The best way to do this is to shoot **OVERLAPPING ACTION**. Have the talent repeat the same action in the close-up exactly the way it was done in the wide or medium shot. This will make the video much easier to edit.

Before you begin, consider the following: Will you shoot indoors, outdoors or a combination of both? This will determine the type of lighting you need. What are your power requirements? Are there any power needs beyond just the video

gear? Could plugging in a light and a circular saw blow your circuit? For a demonstration, do you have several sets of materials on hand so the action can be repeated for the close-up shots?

Bring the tripod along and use it. This is no time for shaky camera work, and overly artistic zooms might distract from the content. The best instructional videos are done with cuts and close-ups and without a lot of fancy effects. Additional considerations include the use of music and any special effects that might be needed.

3

<<<rewind ONLINE LESSONS 1-3

1. If you're unsure of your viewer's level, how would you structure your video?

2. Define continuity and how it relates to instructional videos.

3. List the ways graphics can enhance an instructional video.

how-to

UNIT 10
SECTION
2.6