

# VIDEO PRODUCT DEVELOPMENT



## PURPOSE

To evaluate each contestant's preparation for employment and to recognize outstanding students for excellence and professionalism in the cinematography/video production.

First, refer to General Regulations, Page 9.

## CLOTHING REQUIREMENT

**For men:** Official SkillsUSA white polo shirt with black dress slacks, black socks and black leather shoes.

**For women:** Official SkillsUSA white polo shirt with black dress slacks or skirt, black socks or black or clear seamless hose and black leather shoes.

These regulations refer to clothing items that are pictured and described at: [www.skillsusastore.org](http://www.skillsusastore.org). If you have questions about clothing or other logo items, call 800-401-1560 or 703-956-3723.

**Note:** Contestants must wear their official contest clothing to the contest orientation meeting.

## ELIGIBILITY

Open to all active SkillsUSA members enrolled in a program with filmmaking/video production as the occupational objective.

## EQUIPMENT AND MATERIALS

1. **Supplied by the technical committee:**
  - a. PowerProduction StoryBoard Quick software
2. **Supplied by contestant:**
  - a. Finished video on DVD format
  - b. Each team must bring a Mac or Windows (XP or above) laptop that storyboard software can be loaded onto for the competition.

- c. All competitors must create a one-page résumé using a word processor and submit the résumé electronically at: [www.skillsusa.net/newresume](http://www.skillsusa.net/newresume). Check the Web site for further instructions.
- d. Basic video production equipment consisting of camera, microphone(s), tripod and editing software installed on a computer Basic lighting kits are allowed (floor stand based lights or clamp on lights).
- e. Contestants may not use a crane, jib, truss for lighting or a stedicam type device.

**Note:** Your contest may also require a hard copy of your résumé as part of the actual contest. Check the Contest Guidelines and/or the updates page on the SkillsUSA Web site: [www.skillsusa.org/compete/updates.shtml](http://www.skillsusa.org/compete/updates.shtml)

## SCOPE OF THE CONTEST

The contest is defined by industry standards as set by the current industry technical standards.

The contest will be divided into four portions: a written exam that will assess knowledge in industry standards, a storyboard assignment to be completed in teams of two people, an interview with 1 or more judges and a short video (4.5 to 5 minutes) that will be filmed and edited **on site**. (meaning all work must be done between contest briefing and designated turn in time)

**All footage must be acquired after the contest has begun and must be filmed within the areas specified by the field assignment.**

## Skill Performance

The contest will include a video assignment to be completed at the national conference by a team of two students. The video will use a theme that will be either a single word or phrase that will be given during the contest briefing. Briefing attendance is **mandatory**.

Regardless of the production and post-production tools used, participants **must bring**

**the finished promotional video to the written and storyboard portion of the contest on a DVD for viewing** by the judges. Each team member will be involved in a hands-on/on-site contest storyboard component determined by the national technical committee. Students will turn in video and load storyboard software at orientation. **Students and advisors must attend orientation with the required computer and video to participate in the contest.**

## **Standards and Competencies**

### **VPD 1.0 — Apply the knowledge and skills necessary to describe the production overview**

- 1.1 Describe video production careers
- 1.2 Explain production overview
- 1.3 Complete program proposal and treatment for a production
- 1.4 Explain the three production steps
  - 1.4.1 Explain pre-production
  - 1.4.2 Define the production stage
  - 1.4.3 Explain the post-production step
- 1.5 Complete storyboards for a production
- 1.6 Define scriptwriting guidelines
- 1.7 Explain costing out a production
- 1.8 Define world video standards
- 1.9 Define HDTV standards

### **VPD 2.0 — Implement the knowledge needed to describe how television works, video quality and color**

- 2.1 Describe fields and frames
- 2.2 Define interlaced and progressive scanning
- 2.3 Describe analog and digital signals
- 2.4 Describe component and composite video signals
- 2.5 Demonstrate use of waveform monitor and vectorscope
- 2.6 Describe principles of color

### **VPD 3.0 — Apply the knowledge needed to describe and demonstrate lens operation and control**

- 3.1 Describe the type of lenses
- 3.2 Define angle of view
- 3.3 Describe zoom ratio
- 3.4 Demonstrate f-stops iris
- 3.5 Demonstrate control of depth of field
- 3.6 Illustrate focusing/follow focus/rack focus/macro focus

- 3.7 Explain the application of filters
- 3.8 Explain image stabilization

### **VPD 4.0 — Apply the knowledge and skills necessary to describe and demonstrate camera operation and control**

- 4.1 Define video resolution
- 4.2 Describe and demonstrate camera mounts and tripod use
- 4.3 Operate camera pan heads
- 4.4 Demonstrate basic camera moves (i.e., pan/tilt/dolly/truck/pedestal)
- 4.5 Illustrate black balancing and white balancing
- 4.6 Describe shutter speed
- 4.7 Demonstrate control of exposure through the use of f-stops
- 4.8 Explain frame rate
- 4.9 Demonstrate use of camera viewfinder
- 4.10 Describe safe area

### **VPD 5.0 — Implement the skills and knowledge needed for describing and demonstrating composition**

- 5.1 Describe form vs. content
- 5.2 Demonstrate insert and cutaway shots
- 5.3 Describe static composition
- 5.4 Describe dynamic composition
- 5.5 Define single center of interest
- 5.6 Describe shifting the center of interest
- 5.7 Demonstrate leading the subject
- 5.8 Describe the Rule of Thirds
- 5.9 Define maintaining tonal balance
- 5.10 Define balance of mass
- 5.11 Demonstrate frame central subject matter
- 5.12 Define controlling the number of prime objects

### **VPD 6.0 — Apply the knowledge and skills needed to describe and demonstrate video lighting**

- 6.1 Describe hard and soft lighting
- 6.2 Define color temperature
- 6.3 Demonstrate intensity control through varying distance
- 6.4 Identify lighting instruments
- 6.5 Identify attachments to lighting instruments
- 6.6 Demonstrate three-point lighting (i.e., key/fill/back light)
- 6.7 Describe lighting ratios
- 6.8 Describe back light intensity

- 6.9 Describe subject-to-background distance
- 6.10 Describe area lighting
- 6.11 Apply the uses of existing (natural) light
- 6.12 Demonstrate drawing of a light plot
- 6.13 Identify lighting controls
- 6.14 Calculate on-location power needs

**VPD 7.0 — Implement the skills and knowledge needed to describe and demonstrate audio**

- 7.1 Describe the frequency-loudness relationship
- 7.2 Define room acoustics
- 7.3 Differentiate major microphone designs
- 7.4 Describe directional characteristics
- 7.5 Define handheld and personal microphones
- 7.6 Position microphones
- 7.7 Identify audio connectors
- 7.8 Demonstrate positioning of microphones cables
- 7.9 Describe types and uses of wireless microphones
- 7.10 Describe phase cancellation
- 7.11 Describe methods of creating the stereo effect
- 7.12 Describe digital audio
- 7.13 Describe analog audio
- 7.14 Demonstrate operation of audio mixer controls
- 7.15 Describe issues of using audio from a PA system
- 7.16 Describe production communication systems

**VPD 8.0 — Apply the knowledge and skills needed to describe and demonstrate video recording media**

- 8.1 Describe the videotape recording process
- 8.2 Describe hard drive-based recording
- 8.3 Describe disk-based camcorders
- 8.4 Define solid state memory storage
- 8.5 Describe video servers
- 8.6 Describe consumer video formats
- 8.7 Define digital compression
  - 8.7.1 Describe MPEG-2
  - 8.7.2 Describe MPEG-4
  - 8.7.3 Describe JPEG
- 8.8 List professional video formats

**VPD 9.0 — Apply the knowledge and skills needed to describe and demonstrate video editing**

- 9.1 Describe continuity editing
- 9.2 Demonstrate continuity techniques
- 9.3 Demonstrate cutaways
- 9.4 Define relational and thematic editing
- 9.5 Demonstrate bridging jumps in action
- 9.6 Demonstrate bridging interview edits
- 9.7 Illustrate shooting angles
- 9.8 Describe or demonstrate audio continuity
- 9.9 Demonstrate maintaining consistency in action and detail
- 9.10 Demonstrate operation of software-based editors
- 9.11 Use linear and non-linear editing systems
- 9.12 Explain time-code
- 9.13 Define on-line and off-line editing

**VPD 10.0 — Apply the knowledge and skills needed to describe and demonstrate graphics**

- 10.1 Describe titling
- 10.2 Describe character generator

**VPD 11.0 — Apply the knowledge and skills needed to describe and demonstrate location production**

- 11.1 Complete a location survey
- 11.2 Define camera placement
- 11.3 Illustrate microphone placement for on-location audio
- 11.4 Demonstrate on-location lighting techniques
- 11.5 Illustrate on-location production communication
- 11.6 Define multiple-camera production
- 11.7 Define single-camera production
- 11.8 Define film-style dramatic production

**Committee Identified Academic Skills**

The technical committee has identified that the following academic skills are embedded in this contest.

**Math Skills**

- Measure angles
- Apply transformations (rotate or turn, reflect or flip, translate or slide, and dilate or scale) to geometric figures
- Find slope of a line

**Science Skills**

- Use knowledge of mechanical, chemical and electrical energy

- Use knowledge of heat, light and sound energy
- Use knowledge of temperature scales, heat and heat transfer
- Use knowledge of sound and technological applications of sound waves
- Use knowledge of the nature and technological applications of light
- Use knowledge of static electricity, current electricity and circuits

### **Language Arts Skills**

- Demonstrate use of such verbal communication skills as word choice, pitch, feeling, tone and voice
- Analyze mass media messages

### **Connections to National Standards**

State-level academic curriculum specialists identified the following connections to national academic standards.

### **Math Standards**

- Numbers and operations
- Geometry
- Measurement
- Data analysis and probability
- Problem solving
- Communication
- Connections
- Representation

*Source:* NCTM Principles and Standards for School Mathematics. To view high school standards, visit: [standards.nctm.org/document/chapter7/index.htm](http://standards.nctm.org/document/chapter7/index.htm). Select "Standards" from menu.

### **Science Standards**

- Understands the structure and properties of matter
- Understands the sources and properties of energy
- Understands forces and motion
- Understands the nature of scientific inquiry
- Understands the scientific enterprise

*Source:* McREL compendium of national science standards. To view and search the compendium, visit: [www.mcrel.org/standards-benchmarks/](http://www.mcrel.org/standards-benchmarks/).

### **Language Arts Standards**

- Students adjust their use of spoken, written and visual language (e.g., conventions, style, vocabulary) to communicate effectively with a variety of audiences and for different purposes
- Students employ a wide range of strategies as they write and use different writing process elements appropriately to communicate with different audiences for a variety of purposes
- Students conduct research on issues and interests by generating ideas and questions and by posing problems. They gather, evaluate and synthesize data from a variety of sources (e.g., print and nonprint texts, artifacts, people) to communicate their discoveries in ways that suit their purpose and audience
- Students use spoken, written and visual language to accomplish their own purposes (e.g., for learning, enjoyment, persuasion and the exchange of information)

*Source:* IRA/NCTE Standards for the English Language Arts. To view the standards, visit: [www.ncte.org/standards](http://www.ncte.org/standards).