

TELEVISION (VIDEO) PRODUCTION BLUEPRINT

This Blueprint contains the subject matter content of this Skill Connect Assessment. This Blueprint does **NOT** contain the information one would need to fully prepare for a SkillsUSA Championships contest. Please refer to the *SkillsUSA Championships Technical Standards* CD-ROM for the current year or purchase and download the relevant "Contest Singles." Both are available through www.skillsusa.org > Shop > Educational Materials Catalog.

Standards and Competencies

Apply the knowledge and skills necessary to describe the production overview

- Describe video production careers
- Explain production overview
- Complete program proposal and treatment for a production
- Explain the three production steps
 - Explain pre-production
 - Define the production stage
 - Explain the post-production step
- Complete storyboards for a production
- Define scriptwriting guidelines
- Explain costing out a production
- Define world video standards
- Define HDTV standards

Implement the knowledge needed to describe how television works, video quality and color

- Describe fields and frames
- Define interlaced and progressive scanning
- Describe analog and digital signals
- Describe component and composite video signals
- Demonstrate use of waveform monitor and vectorscope
- Describe principles of color

Apply the knowledge needed to describe and demonstrate lens operation and control

- Describe the type of lenses
- Define angle of view
- Describe zoom ratio
- Demonstrate f-stops iris
- Demonstrate control of depth of field
- Illustrate focusing/follow focus/rack focus/macro focus
- Explain the application of filters
- Explain image stabilization

Apply the knowledge and skills necessary to describe and demonstrate camera operation and control

- Define video resolution
- Describe and demonstrate camera mounts and tripod use
- Operate camera pan heads
- Demonstrate basic camera moves (i.e., pan/tilt/dolly/truck/pedestal)
- Illustrate black balancing and white balancing
- Describe shutter speed
- Demonstrate control of exposure through the use of f-stops

- Explain frame rate
- Demonstrate use of camera viewfinder
- Describe safe area

Implement the skills and knowledge needed for describing and demonstrating composition

- Describe form vs. content
- Demonstrate insert and cutaway shots
- Describe static composition
- Describe dynamic composition
- Define single center of interest
- Describe shifting the center of interest
- Demonstrate leading the subject
- Describe the Rule of Thirds
- Define maintaining tonal balance
- Define balance of mass
- Demonstrate frame central subject matter
- Define controlling the number of prime objects

Apply the knowledge and skills needed to describe and demonstrate video lighting

- Describe hard and soft lighting
- Define color temperature
- Demonstrate intensity control through varying distance
- Identify lighting instruments
- Identify attachments to lighting instruments
- Demonstrate three point lighting (i.e., key/ fill/ back light)
- Describe lighting ratios
- Describe back light intensity
- Describe subject-to-background distance
- Describe area lighting
- Apply the uses of existing (natural) light
- Demonstrate drawing of a light plot
- Identify lighting controls
- Calculate on-location power needs

Implement the skills and knowledge needed to describe and demonstrate audio

- Describe the frequency-loudness relationship
- Define room acoustics
- Differentiate major microphone designs
- Describe directional characteristics
- Define handheld and personal microphones
- Position microphones
- Identify audio connectors
- Demonstrate positioning of microphones cables
- Describe types and uses of wireless microphones
- Describe phase cancellation
- Describe methods of creating the stereo effect
- Describe digital audio
- Describe analog audio
- Demonstrate operation of audio mixer controls
- Describe issues of using audio from a PA system
- Describe production communication systems

Apply the knowledge and skills needed to describe and demonstrate video recording media

- Describe the videotape recording process

- Describe hard drive based recording
- Describe disk-based camcorders
- Define solid state memory storage
- Describe video servers
- Describe consumer video formats
- Define digital compression
 - Describe MPEG-2
 - Describe MPEG-4
 - Describe JPEG
- List professional video formats

Apply the knowledge and skills needed to describe and demonstrate video editing

- Describe continuity editing
- Demonstrate continuity techniques
- Demonstrate cutaways
- Define relational and thematic editing
- Demonstrate bridging jumps in action
- Demonstrate bridging interview edits
- Illustrate shooting angles
- Describe or demonstrate audio continuity
- Demonstrate maintaining consistency in action and detail
- Demonstrate operation of software-based editors
- Use linear and non-linear editing systems
- Explain time-code
- Define on-line and off-line editing

Apply the knowledge and skills needed to describe and demonstrate graphics

- Describe titling
- Describe character generator

Apply the knowledge and skills needed to describe and demonstrate location production

- Complete a location survey
- Define camera placement
- Illustrate microphone placement for on-location audio
- Demonstrate on-location lighting techniques
- Illustrate on-location production communication
- Define multiple-camera production
- Define single-camera production
- Define film-style dramatic production

Committee Identified Academic Skills

The SkillsUSA national technical committee has identified that the following academic skills are embedded in the television (video) production training program and assessment:

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 verbal communication skills, such 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. 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/.

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.readwritethink.org/standards/index.html.